

Millers Foundry Site Investigation Narrative

Prepared by Phillip Skaggs

EPA ID # ALD983166034

NFRAP APPROVED
BJ 11/9/98

Ref # 04866

Under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) the Superfund Amendments Reauthorization Act of 1986 (SARA) and a cooperative agreement between the U.S Environmental Protection Agency and the Alabama Department of Environmental Management, (ADEM) has conducted a Site Investigation of the Millers Foundry Site in Jefferson County, Alabama. Millers Foundry is located in the small community of McCombs, at 6220 Amber Hills Road. The coordinates for the site are 33.563681N 86.616563W. The purpose of the investigation was to assess the threat to human health and the environment the site may pose. This included reviewing existing information, limited sampling, and evaluating the site under the Hazard Ranking System (HRS).

Site Description and History:

The Millers Foundry Site began operations sometime in the early 1950s, and ceased operations in December of 1995. The area of the site is approximately 2 acres with a minimal slope. On the western side of the property is a heavily wooded ridge made up of fill material and foundry sands. The remains of partially buried drums are visible in the face of the ridge. The visible drums in the slope are decayed, and have no contents in them. Near the base of this ridge is an old rail bed, that runs parallel with the ridge. Bordered by the rail bed and ridge is a low area that contains a black dip paint that has migrated from the site. The site proper is a large cement foundation with no buildings left standing. Approximately 2,000 cubic feet of used foundry sand, thirty one, 55 gallon drums, and approximately 4,000 gallons of dip paint mixed with foundry sands are on this foundation. The known past disposal practice was to place waste around the property and to have wastes and foundry sands removed by a local resident in a dump truck to be placed at various locations in the surrounding area. The local resident was interviewed at the Preliminary assessment stage of this investigation and confirmed this disposal method. One of the former disposal areas is being investigated as a CERCLA site under the name of McCombs dump. The amount of spillage and disposal is unknown.

The facility was operated most recently by Jones Plumbing Systems, Inc. and Jones Manufacturing Company, Inc. The site is currently owned by Southtrust Bank, due to bankruptcy. The property formerly housed the foundry building of 35,789 square feet which was sold for scrap by Southtrust Bank and

Site: MILLER'S FOUNDRY
Break: 1.9
Other: V.1



dismantled by Western Steel Inc. The property is unsecured, and has several abandoned cars and a truck now on it. These vehicles have been abandoned after the initial site reconnaissance.

A search of ADEM's files shows no past regulatory history. The main materials used in processes at the facility were, foundry sands for casting and molding process, various metals for the pipes, resins for the molds, dip paints used for finished castings, solvents (mainly toluene) for cleaning and paint thinning.

The site and drainage pathways have been sampled in two separate investigations. The sampling data revealed levels of Nickel (24.8ppb), Chromium (984ppb), Arsenic (61.6ppb) and Toluene (35,768ppb) in the foundry sand piles and drums located on the foundation. (Ref.1) The sampling data in the drainage pathways showed no significant levels of these contaminants.(Ref. 1)

Ground Water Use:

The six city wells for Leeds are part of an equal distribution system. Well Number 5, is in the target distance limit of four miles, used by the CERCLA HRS. The system of Leeds serves approximately 14,000 persons. Thus well No.# 5 serves approximately 2,333 persons. There are 6 persons on well water approximately ¼ mile from the site. Two industrial wells owned by Southern Railway are also known to be within the target distance limits.

Generalized Hydrogeology:.

The site is located in east Jefferson County in what is considered to be the Cahaba district of the Alabama Valley and Ridge physiographic section. The site has an estimated elevation of 620 feet above mean sea level. The Cahaba Ridge district consists of ridges underlain by gently folded sandstone and conglomerate beds, separated by valleys underlain by shale.

Soils at the site are classified as Palmerdale complex, steep with slopes ranging from 15 to 60 percent. This complex consists of steep, somewhat excessively drained Palmerdale soils and other soils on surface mining spoil piles. Typically, these soils are more than 60 inches thick and are dark gray very shaly silt loam.

The available water capacity for Palmerdale soils is low. These soils are not well suited to cultivated crops, pasture, and hay because of steep slopes, fragments on the surface, and the droughty nature of the soils. Present use of these soils is oriented primarily towards reclamation and establishment of trees.

Geologic units that crop out in this part of Jefferson County range in age from Cambrian to Pennsylvanian and are very complex in structure. Rocks in the vicinity of the site consist of the Pottsville Formation and are Pennsylvanian in age.

The Pottsville Formation consists of alternating beds of shale and sandstone with numerous coal seams and associated beds of clay. In parts of Jefferson County the Pottsville is over 5,100 feet thick, but in parts of the county it is of undermined thickness due to faulting and folding.

The Pottsville is characterized by steep and rugged valleys and ridges. The massive sandstone units are resistant to weathering and are often topographically higher than the shales that are more susceptible to erosion. The extent of weathering in the Pottsville primarily depends on the lithology of the rock unit. The shale may weather to depths of up to 20 feet and the sandstone to depths of up to 15 feet. The regolith

derived from weathering of the shale generally is a silty loam containing shale fragments and has a slow infiltration rate.

Most of the permeability of the sandstone unit is the result of fractures in the bedrock. Some sandstone units of the Pottsville may be permeable, but the shale units are relatively impermeable. Groundwater generally can be obtained by drilling to depths of less than 200 feet, but the Pottsville aquifer generally yields less than 10 gallons per minute to wells.

The major groundwater aquifer in the area is the Pottsville Aquifer. Groundwater in the Pottsville Formation exists in the sandstone and in residual soils and in openings along joints, faults, and bedding planes. Except where fractured, the coal, shale and siltstone are relatively impermeable and usually do not yield significant quantities of water to wells.. The water table ranges from 10 to 50 feet below the surface, and quantities of water suitable for domestic needs generally occur at depths of less than 200 feet. Yields to most wells in the area are less than 10 gallons per minute.

The source of recharge to the aquifers in the area is through rainfall. Average annual rainfall in the area is about 53 inches per year. A large part of this rainfall is lost either by direct runoff to streams immediately after a rain or by evapotranspiration to the atmosphere. A relatively small part of the total rainfall infiltrates to the water table to recharge the aquifers.

The permeability for the area is 1.4×10^{-3} and depth to shallowest aquifer is approximately 10 to 50 feet.

Surface Water Pathway:

The overland drainage from the site is to the northwest, west, southwest, and east. The drainage from the northwest enters into an intermittent stream at the back of the property. Western drainage has accumulated in a low area that was formerly a borrow ditch for an abandoned railroad which has now been removed. Southwestern drainage is to a municipal drain. Eastern drainage is to a small impounded area which then leads to an unnamed tributary that flows to approximately $\frac{1}{2}$ mile to Lake George. An unnamed tributary flows from Lake George another 1.5 miles into the Cahaba River.

There are no drinking water intakes located within 15 miles down stream of the site.

Soil Exposure:

The site is now abandoned, and open to the general public. Several piles of trash and three abandoned vehicles have been placed on site since the Foundry was demolished. The materials on site are a slight risk to the general public. The site represents more of an eye sore than a public health risk.

Conclusions:

The main pathway of concern in regards to the CERCLA hazards ranking system is the potential for ground water contamination . There is one municipal well approximately 3.9 miles away from the site serving 2,333 persons. Thus far this well has not shown the contaminants present at this site. No ground water data at this site has shown to have the contaminants found in this investigation. Under the CERCLA program it is the potential for ground water contamination that makes this site significant. The wastes on site have no or little containment for migration to the ground water . Although the site is of concern, under the ranking system, set forth by the CERCLA program, the site does not meet the requirement for further action under the CERCLA Super Fund program. The writer recommends the site be considered for No Further Action.

References :

1. Sample data from 02-26-98, 09-03-97.
2. Superfund Chemical Data Matrix Data Sources (SCDM).
3. ADEM Ground Water Branch, Hydrogeology Report .
4. Demographic Profile, 1990 Census Ala. Counties and Cities By Race, Ala. State Data Center.
5. The Local Climatological Data, annual summary: National Oceanic and Atmospheric Administration, U.S Department of Commerce, 1985, published annually.
6. Geological Survey of Alabama, Bulletin 113. 7-day Low Flows and Flow Duration of Ala. Streams through 1973.
7. Planert, Michael, Pritchett, James L., Jr., 1989, Geohydrology and Susceptibility of Major Aquifers to Surface Contamination in Alabama; Area 4: U.S. Geological Survey, Water-Resources Report 88-4133.
8. ADEM, Water Division, Water Quality Program, "Water Use Classification", Chapter 335-6-11, 1986.
9. Alabama Federally Listed Endangered/Threatened Species, 03/19/92.
10. Preliminary assessment for Millers Foundry by Jerry Cheat wood .

SI TABLE 3: WASTE CHARACTERIZATION WORKSHEET

Site Name: Millers Foundry

References: # 1, 2

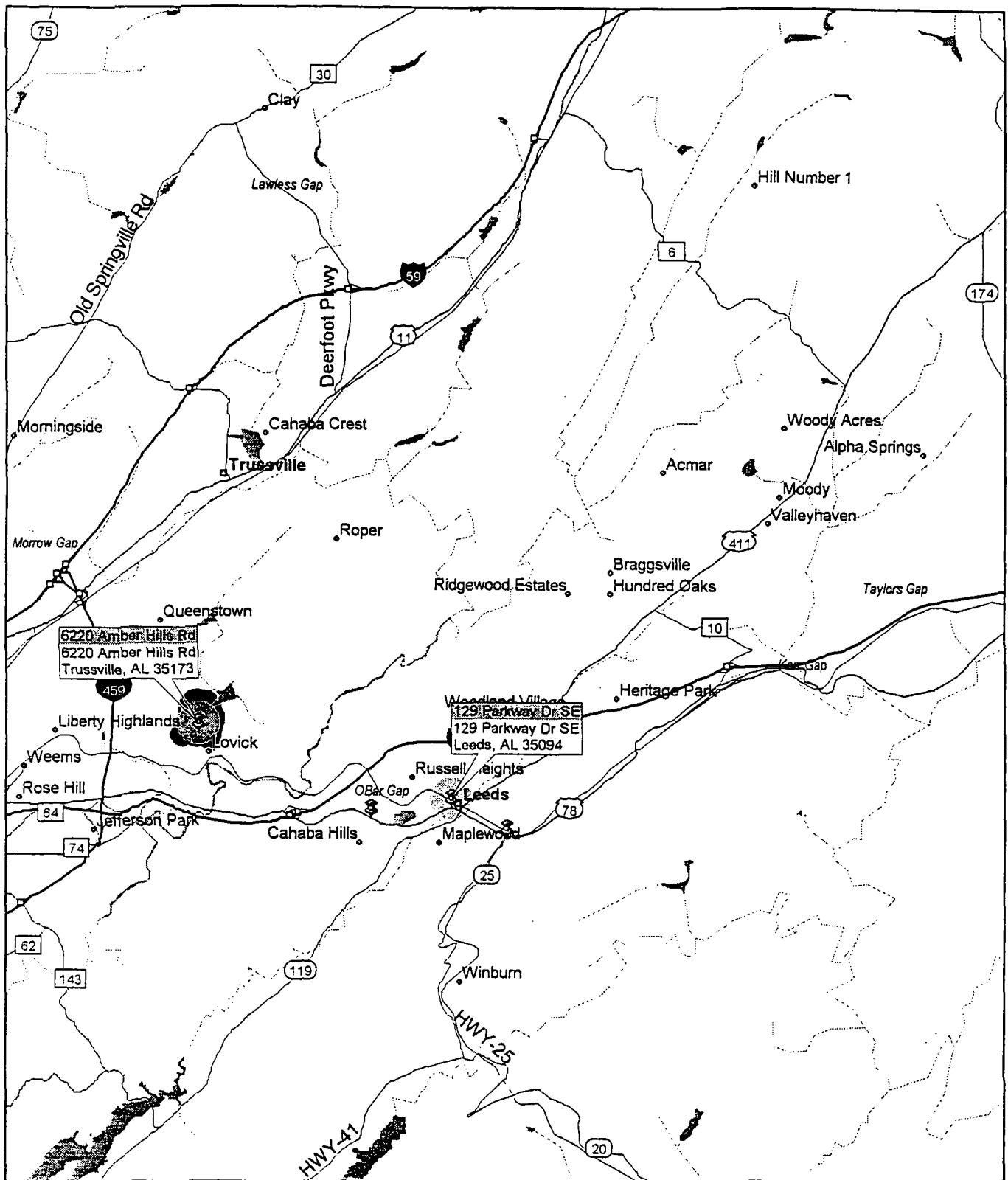
Sources:

1. Used Foundry Sands
2. Sediment in sumps
3. Drums

Source	Haz. Sub	Toxicity	GW Path	SW Path							
			GW Mob	Tox Mob	Per	Tox/ Per	Bio Pot	Tox /Per/ Bio	Ecotox	Ecotox/ per	Ecotox/ Per/Bio
1,2	Arsenic	10,000	1	10,000	1	10,000	500	50,000	10	10	5000
3	Toluene	10	1	10	.4	4	50	200	100	40	2,000
1,2	Chromium	10,000	1	10,000	1	10,000	5	50,000	100	100	500
1,2	Nickel	10,000	.002	20	1	10,000	500	5,000,000	10	10	5,000

Millers Foundry 6220 Amber Hills Rd

Ref. #6696



Streets98

Sampling

The Millers Foundry site, ALD 983166034, Ref. NO.# 6696 has been sampled on three separate occasions during an initial Preliminary Assessment investigation by Jerry Cheatwood on 03-14-97 and two, more in depth sampling events on 02-26-98 and 04-16-98 by Phillip Skaggs, Jerremy Stamps, and Chris Smith. The Initial sampling event on 03-14-97, was narrow of focus and served to confirm the existence of a hazardous substance on site, (Toluene at 35,768 ug/g sample ID # S-2 on the following map). The second more extensive sampling covered most of the sources on site, surface water pathways, leaving the site and background samples of soil, water and sediment were collected to the East of the site. The third sampling of the site for the SI was conducted on 04-16-98 and was limited to the shallow basins or "sumps" in the old foundation its self. The sample locations, and descriptions of all these three sampling events are labeled on the following map. The lab results for each is on the following pages.

ADEM CENTRAL LAB

06/08/98

**ADEM
CENTRAL
LAB****To: ADEM**1751 Congress W. Dickinson Dr.
Montgomery, Al. 36109
CERCLA (Site Insp/Invest)

Source..... MILLERS FOUNDRY

Location.. MF-0018

Sample Collector.. PHILLIP SKAGGS

Sample Matrix..... SOIL

Fund Code No..... 521

Date Collected.. 04/16/98

Date Submitted.. 04/21/98

Attention: PHILLIP SKAGGS

Sample No.	Analysis	Result	Units	MDL	Date Completed	Method
------------	----------	--------	-------	-----	----------------	--------

AA09407

Hexavalent Chromium in Soil	< MDL	ug/g	2.0	04/21/98	SM312B
-----------------------------	-------	------	-----	----------	--------

Trace Metals

Aluminum in Soil using ICP	10910	ug/g	20.0	05/13/98	EPA200.7
Antimony in Soil-by ICP	13.6	ug/g	10.0	05/13/98	EPA200.7
Arsenic in Soil by ICP	13.9	ug/g	10	05/13/98	EPA200.7
Barium in Soil by ICP	16.7	ug/g	1.5	05/13/98	EPA200.7
Cadmium in Soil by ICP	< MDL	ug/g	1	05/13/98	EPA200.7
Calcium in Soil by ICP	1010	ug/g	20.0	05/13/98	EPA200.7
Chromium in Soil by ICP	48.3	ug/g	1.5	05/13/98	EPA200.7
Copper in Soil by ICP	39.7	ug/g	2	05/13/98	EPA200.7
Iron in Soil by ICP	31710	ug/g	2	05/13/98	EPA200.7
Lead in Soil by ICP	67.3	ug/g	10.0	05/13/98	EPA200.7
Magnesium in Soil by ICP	2010	ug/g	5.00	05/13/98	EPA200.7
Manganese in Soil by ICP	314	ug/g	2.00	05/13/98	EPA200.7
Mercury-Soil-Manual-Cold-Vap	< MDL	ug/g	0.10	06/05/98	EPA245.5
Nickel in Soil by ICP	24.8	ug/g	0.900	05/13/98	EPA200.7
Selenium in Soil by ICP	< MDL	ug/g	10.0	05/13/98	EPA200.7
Silver in Soil using ICP	< MDL	ug/g	1.5	05/13/98	EPA200.7
Sodium in Soil using ICP	109	ug/g	20.0	05/13/98	EPA200.7
Zinc in Soil by ICP	787.90	ug/g	3.00	05/13/98	EPA200.7

SEMI-VOLATILES by GC/MS

1,2,4-Trichlorobenzene	< MDL	ug/g	3.40	05/05/98	SW8270
1,2-Dichlorobenzene	< MDL	ug/g	3.40	05/05/98	SW8270
1,2-Diphenylhydrazine	< MDL	ug/g	3.40	05/05/98	SW8270
1,3-Dichlorobenzene	< MDL	ug/g	3.40	05/05/98	SW8270
1,4-Dichlorobenzene	< MDL	ug/g	3.40	05/05/98	SW8270
2,4,6-Trichlorophenol	< MDL	ug/g	3.40	05/05/98	SW8270
2,4-Dichlorophenol	< MDL	ug/g	3.40	05/05/98	SW8270
2,4-Dimethylphenol	< MDL	ug/g	3.40	05/05/98	SW8270
2,4-Dinitrophenol	< MDL	ug/g	3.40	05/05/98	SW8270
2,4-Dinitrotoluene	< MDL	ug/g	3.40	05/05/98	SW8270
2,6-Dinitrotoluene	< MDL	ug/g	3.40	05/05/98	SW8270
2-Chloronaphthalene	< MDL	ug/g	3.40	05/05/98	SW8270
2-Chlorophenol	< MDL	ug/g	3.40	05/05/98	SW8270
2-Nitrophenol	< MDL	ug/g	3.40	05/05/98	SW8270
3,3'-Dichlorobenzidine	< MDL	ug/g	3.40	05/05/98	SW8270
4,6-Dinitro-2-methylphenol	< MDL	ug/g	3.40	05/05/98	SW8270
4-Bromophenyl-phenylether	< MDL	ug/g	3.40	05/05/98	SW8270

ADEM CENTRAL LAB

06/08/98

To: ADEM

1751 Congress W. Dickinson Dr.
Montgomery, Al. 36109.
CERCLA (Site Insp/Invest)

Source..... MILLERS FOUNDRY

Location.. MF-002 **8**

Sample Collector.. PHILLIP SKAGGS

Sample Matrix..... SOIL

Fund Code No..... 521



**ADEM
CENTRAL
LAB**

Date Collected..04/16/98

Date Submitted.. 04/21/98

Attention: PHILLIP SKAGGS

Sample No.	Analysis	Result	Units	MDL	Date Completed	Method
AA09408						

Hexavalent Chromium in Soil	< MDL	ug/g	2.0	04/21/98	SM312B
-----------------------------	-------	------	-----	----------	--------

Trace Metals

Aluminum in Soil using ICP	3450	ug/g	20.0	05/13/98	EPA200.7
Antimony in Soil-by ICP	< MDL	ug/g	10.0	05/13/98	EPA200.7
Arsenic in Soil by ICP	< MDL	ug/g	10	05/13/98	EPA200.7
Barium in Soil by ICP	16.3	ug/g	1.5	05/13/98	EPA200.7
Cadmium in Soil by ICP	2.16	ug/g	1	05/13/98	EPA200.7
Calcium in Soil by ICP	959	ug/g	20.0	05/13/98	EPA200.7
Chromium in Soil by ICP	82.9	ug/g	1.5	05/13/98	EPA200.7
Copper in Soil by ICP	69.8	ug/g	2	05/13/98	EPA200.7
Iron in Soil by ICP	76060	ug/g	2	05/13/98	EPA200.7
Lead in Soil by ICP	69.3	ug/g	10.0	05/13/98	EPA200.7
Magnesium in Soil by ICP	661	ug/g	5.00	05/13/98	EPA200.7
Manganese in Soil by ICP	430	ug/g	2.00	05/13/98	EPA200.7
Mercury-Soil-Manual-Cold-Vap	0.13	ug/g	0.10	06/05/98	EPA245.5
Nickel in Soil by ICP	35.3	ug/g	0.900	05/13/98	EPA200.7
Selenium in Soil by ICP	< MDL	ug/g	10.0	05/13/98	EPA200.7
Silver in Soil using ICP	< MDL	ug/g	1.5	05/13/98	EPA200.7
Sodium in Soil using ICP	99.1	ug/g	20.0	05/13/98	EPA200.7
Zinc in Soil by ICP	989.40	ug/g	3.00	05/13/98	EPA200.7

SEMI-VOLATILES by GC/MS

1,2,4-Trichlorobenzene	< MDL	ug/g	3.40	05/05/98	SW8270
1,2-Dichlorobenzene	< MDL	ug/g	3.40	05/05/98	SW8270
1,2-Diphenylhydrazine	< MDL	ug/g	3.40	05/05/98	SW8270
1,3-Dichlorobenzene	< MDL	ug/g	3.40	05/05/98	SW8270
1,4-Dichlorobenzene	< MDL	ug/g	3.40	05/05/98	SW8270
2,4,6-Trichlorophenol	< MDL	ug/g	3.40	05/05/98	SW8270
2,4-Dichlorophenol	< MDL	ug/g	3.40	05/05/98	SW8270
2,4-Dimethylphenol	< MDL	ug/g	3.40	05/05/98	SW8270
2,4-Dinitrophenol	< MDL	ug/g	3.40	05/05/98	SW8270
2,4-Dinitrotoluene	< MDL	ug/g	3.40	05/05/98	SW8270
2,6-Dinitrotoluene	< MDL	ug/g	3.40	05/05/98	SW8270
2-Chloronaphthalene	< MDL	ug/g	3.40	05/05/98	SW8270
2-Chlorophenol	< MDL	ug/g	3.40	05/05/98	SW8270
2-Nitrophenol	< MDL	ug/g	3.40	05/05/98	SW8270
3,3'-Dichlorobenzidine	< MDL	ug/g	3.40	05/05/98	SW8270
4,6-Dinitro-2-methylphenol	< MDL	ug/g	3.40	05/05/98	SW8270
4-Bromophenyl-phenylether	< MDL	ug/g	3.40	05/05/98	SW8270

ADEM CENTRAL LAB

03/05/98



ADEM
CENTRAL
LAB

To: ADEM

1751 Congress W. Dickinson Dr.
Montgomery, Al. 36109
CERCLA (Site Insp/Invest)

Source..... MILLERS FOUNDGRY

Location.. MF-1

Sample Collector.. PHILLIP

Sample Matrix..... SOIL

Fund Code No..... 521

Date Collected..02/26/98

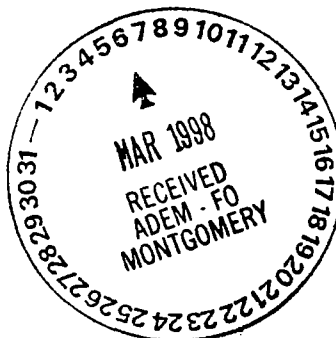
Date Submitted..02/27/98

Attention: PHILLIP SKAGGS

Sample No.	Analysis	Result	Units	MDL	Date Completed	Method
AA08779						

Trace Metals

Arsenic in Soil by ICP	< MDL	ug/g	10	03/05/98	EPA200.7
Barium in Soil by ICP	10.2	ug/g	1.5	03/05/98	EPA200.7
Cadmium in Soil by ICP	< MDL	ug/g	1	03/05/98	EPA200.7
Chromium in Soil by ICP	45.3	ug/g	1.5	03/05/98	EPA200.7
Lead in Soil by ICP	< MDL	ug/g	10.0	03/05/98	EPA200.7
Mercury-Soil-Manual-Cold-Vap	< MDL	ug/g	0.1	03/05/98	EPA245.5
Selenium in Soil by ICP	< MDL	ug/g	10.0	03/05/98	EPA200.7
Silver in Soil using ICP	< MDL	ug/g	1.5	03/05/98	EPA200.7



ADEM CENTRAL LAB

03/05/98

To: ADEM

1751 Congress W. Dickinson Dr.
Montgomery, Al. 36109
CERCLA (Site Insp/Invest)

Source..... MILLERS FOUNDGRY

Location.. MF-2

Sample Collector.. PHILLIP

Sample Matrix..... SOIL

Fund Code No..... 521



ADEM
CENTRAL
LAB

Date Collected..02/26/98

Date Submitted.. 02/27/98

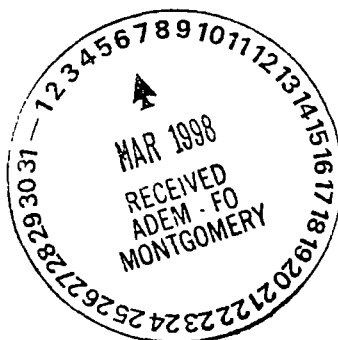
Attention: PHILLIP SKAGGS

Sample No.	Analysis	Result	Units	MDL	Date Completed	Method
------------	----------	--------	-------	-----	----------------	--------

AA08780

Trace Metals

Arsenic in Soil by ICP	61.6	ug/g	10	03/05/98	EPA200.7
Barium in Soil by ICP	< MDL	ug/g	1.5	03/05/98	EPA200.7
Cadmium in Soil by ICP	15.6	ug/g	1	03/05/98	EPA200.7
Chromium in Soil by ICP	984	ug/g	1.5	03/05/98	EPA200.7
Lead in Soil by ICP	12.8	ug/g	10.0	03/05/98	EPA200.7
Mercury-Soil-Manual-Cold-Vap	< MDL	ug/g	0.1	03/05/98	EPA245.5
Selenium in Soil by ICP	< MDL	ug/g	10.0	03/05/98	EPA200.7
Silver in Soil using ICP	2.53	ug/g	1.5	03/05/98	EPA200.7



ADEM CENTRAL LAB

04/21/97



**ADEM
CENTRAL
LAB**

Source..... MILLER'S FOUNDRY
 Dickinson Dr. Location... S-2
 AL 36109 Sample Collector.. CHEATWOOD
 Insp/Invest) Sample Matrix..... SOIL
 Fund Code No..... 521

Date Collected..03/14/97
 Date Submitted..03/17/97

JERRY CHEATWOOD

Analysis	Result	Units	MDL	Date Completed	Method
----------	--------	-------	-----	----------------	--------

Volatiles in Soil

Chloroethane	<MDL	ug/g	935.60	03/26/97	SW8260
Chloroform	<MDL	ug/g	935.60	03/26/97	SW8260
Chloromethane	<MDL	ug/g	935.60	03/26/97	SW8260
DBCP (1,2-Dibromo-3-chloro	<MDL	ug/g	935.60	03/26/97	SW8260
Dibromochloromethane	<MDL	ug/g	935.60	03/26/97	SW8260
Dibromomethane	<MDL	ug/g	935.60	03/26/97	SW8260
Dichlorodifluoromethane	<MDL	ug/g	935.60	03/26/97	SW8260
Diethyl Ether	<MDL	ug/g	935.60	03/26/97	SW8260
Ethyl Methacrylate	<MDL	ug/g	935.60	03/26/97	SW8260
Ethylbenzene	<MDL	ug/g	935.60	03/26/97	SW8260
Hexachlorobutadiene	<MDL	ug/g	935.60	03/26/97	SW8260
Hexachloroethane	<MDL	ug/g	935.60	03/26/97	SW8260
Isopropylbenzene	<MDL	ug/g	935.60	03/26/97	SW8260
MIBK (4-Methyl-2-pentanone)	<MDL	ug/g	935.60	03/26/97	SW8260
MTBE [Methyl-tert-Butyl	<MDL	ug/g	935.60	03/26/97	SW8260
Methacrylonitrile	<MDL	ug/g	935.60	03/26/97	SW8260
Methyl Iodide	<MDL	ug/g	935.60	03/26/97	SW8260
Methylacrylate	<MDL	ug/g	935.60	03/26/97	SW8260
Methylene Chloride	<MDL	ug/g	935.60	03/26/97	SW8260
Methylmethacrylate	<MDL	ug/g	935.60	03/26/97	SW8260
Naphthalene	<MDL	ug/g	935.60	03/26/97	SW8260
Nitrobenzene	<MDL	ug/g	935.60	03/26/97	SW8260
Pentachloroethane	<MDL	ug/g	935.60	03/26/97	SW8260
Propionitrile	<MDL	ug/g	935.60	03/26/97	SW8260
Styrene	<MDL	ug/g	935.60	03/26/97	SW8260
THF [Tetrahydrofuran]	<MDL	ug/g	935.60	03/26/97	SW8260
Tetrachloroethylene	<MDL	ug/g	935.60	03/26/97	SW8260
Toluene	35,768.0	ug/g	935.60	03/26/97	SW8260
Trichloroethene	<MDL	ug/g	935.60	03/26/97	SW8260
Trichlorofluoromethane	<MDL	ug/g	935.60	03/26/97	SW8260
Vinyl Chloride	<MDL	ug/g	935.60	03/26/97	SW8260
cis-1,2-Dichloroethene	<MDL	ug/g	935.60	03/26/97	SW8260
cis-1,3-Dichloropropene	<MDL	ug/g	935.60	03/26/97	SW8260
meta-Xylene	<MDL	ug/g	935.60	03/26/97	SW8260
n-Butylbenzene	<MDL	ug/g	935.60	03/26/97	SW8260
n-Propylbenzene	<MDL	ug/g	935.60	03/26/97	SW8260
ortho-Xylene	<MDL	ug/g	935.60	03/26/97	SW8260
para-Xylene	<MDL	ug/g	935.60	03/26/97	SW8260
sec-Butylbenzene	<MDL	ug/g	935.60	03/26/97	SW8260
tert-Butylbenzene	<MDL	ug/g	935.60	03/26/97	SW8260
trans-1,2-Dichloroethene	<MDL	ug/g	935.60	03/26/97	SW8260
trans-1,3-Dichloropropene	<MDL	ug/g	935.60	03/26/97	SW8260
trans-1,4-Dichloro-2-butene	<MDL	ug/g	935.60	03/26/97	SW8260

Date: August 15 , 1997

Prepared by: Jerry Cheatwood
ADEM/Land/Site Assessment Unit

Site Name: Miller's Foundry
McCombs, Jefferson County, Alabama
Reference Number 6696

1. INTRODUCTION

Under authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA) and a cooperative agreement between the U.S. Environmental Protection Agency and the Alabama Department of Environmental Management (ADEM), a Preliminary Assessment (PA) was conducted at the Miller's Foundry site, McCombs, Jefferson County, Alabama. The purpose of this investigation was to collect information concerning conditions at the Miller's Foundry site sufficient to assess the threat posed to human health and the environment and to determine the need for additional investigation under CERCLA/SARA or other action. The scope of the investigation included a review of available file information, a comprehensive target survey, and an onsite reconnaissance.

2. SITE DESCRIPTION, OPERATIONAL HISTORY AND WASTE CHARACTERISTICS

2.1 Location

Miller's Foundry is located in the small community of McCombs in Jefferson County, Alabama. The address of this former operation is 6220 Amber Hills Road, Birmingham, AL 35173 (Attachment A). The geographic coordinates for this site as collected with a GPS are 33.563681N/86.616563W. The directions to the site are as follows: turn north at the caution light on Highway 78 between Leeds and Irondale onto Floyd Bradford Road, proceed 0.5 miles and turn left onto Jones Industrial Drive which will end 0.8 miles ahead at Amber Hills Road, the foundry site is directly ahead across the street (Attachment B). The climate in the Irondale area is temperate. Mean annual rainfall in Birmingham, approximately 7 miles west of McCombs, is 53.7 inches. The average daily high temperature in the area is approximately 79° F. The average daily low is approximately 45° F (Attachment C).

2.2 Site Description

The area of the site is approximately 2 acres with a minimal slope due to grading of the property; however, the site has a steep slope on the western portion of the property which is fill material with visible wastes and drums in the face of this area. There are many areas of vegetation onsite which do appear to be unnaturally stressed (Attachments E,F). There are no structures remaining on the property. The property formerly housed the foundry building of 35,789 square feet which was sold for scrap by Southtrust Bank and dismantled by Western Steel Inc. The property is totally unsecured.

2.3 Operational History and Waste Characteristics

The site was operated for the past several years by Jones Plumbing Systems, Inc. and Jones Manufacturing Company, Inc. The site is currently owned by Southtrust Bank, due to bankruptcy, and is for sale; however, the Deed is still held by representatives of Jones Plumbing by Mr. Lynn P. Harrison III with Curtis, Mallet-Provost, Colt, and Mosle at 101 Park Avenue New York, New York 10178-0061 phone (212) 696-6199 (Attachment G). A former party in site operations is "Butch" Jones who operates Jones Stephens Company in Moody, Alabama phone (800) 35-Jones.

Portions of the site were also built on and contamination has spread to the abandoned railroad grade right-of-way for the old Central of Georgia Railroad (Attachment F). Site operations began sometime in the 1950's where site operations have existed until the site was abandoned in December of 1995. The site has no past regulatory history. The types of materials handled are: foundry sands used in the casting and molding process, resins for making molds, paints used for the finished castings, solvents for cleaning and paint thinning, PCBs which are suspected in the area of the former power plant which is now dismantled - this area now contains only one transformer (others were sold by Southtrust) but still has approximately 120 large capacitors, and asbestos is also located at this site. The known disposal practice was to place waste around the property and to have wastes and foundry sands removed by a local resident by dump truck to be placed at various locations in the surrounding area. The amount of spillage and disposal is unknown. When questioning the person who removed the wastes he stated he had been removing wastes from the site for over 40 years and that he could not estimate the total number of loads removed.

The type sources at the site then are approximately 73 drums of unknown contents onsite, approximately 30 drums which can be seen in the face of the fill area – suspected many more buried, 4 dip vats of paint waste estimated to be 1,200 gallons, several piles of various materials totaling approximately 4,950 square feet, the fill area of approximately ½ acre, a naturally occurring surface impoundment of 6,000 square feet – 30x200 feet, and 3 acres of associated contaminated soil .

3. Ground Water Pathway

3.1 Hydrogeologic Setting

The site is located in east Jefferson County in what is considered to be the Cahaba Ridge district of the Alabama Valley and Ridge physiographic section. The site has an estimated elevation of 620 feet above mean sea level. The Cahaba Ridge district consists of ridges underlain by gently folded sandstone and conglomerate beds, separated by valleys underlain by shale.

Soils at the site are classified as Palmerdale complex, steep with slopes ranging from 15 to 60 percent. This complex consists of steep, somewhat excessively drained Palmerdale soils and other soils on surface mining spoil piles. Typically, these soils are more than 60 inches thick and are dark gray very shaly silt loam.

The available water capacity for Palmerdale soils is low. These soils are not well suited to cultivated crops, pasture, and hay because of steep slopes, fragments on the surface, and the droughty nature of the soils. Present use of these soils is oriented primarily towards reclamation and establishment of trees.

Geologic units that crop out in this part of Jefferson County range in age from Cambrian to Pennsylvanian and are very complex in structure. Rocks in the vicinity of the site consist of the Pottsville Formation and are Pennsylvanian in age.

The Pottsville Formation consists of alternating beds of shale and sandstone with numerous coal seams and associated beds of uncerclay. In parts of Jefferson County the Pottsville is over 5,100 feet thick, but in part of the county it is of undetermined thickness due to faulting and folding.

The Pottsville is characterized by steep and rugged valleys and ridges. The massive sandstone units are resistant to weathering and are often topographically higher than the shales that are more susceptible to erosion. The extent of weathering in the Pottsville primarily depends on the lithology of the rock unit. The shale may weather to depths of up to 20 feet and the sandstone to depths of up to 15 feet. The regolith derived from weathering of the shale generally is a silty loam containing shale fragments and has a slow infiltration rate.

Most of the permeability of the sandstone unit is the result of fractures in the bedrock. Some sandstone units of the Pottsville may be permeable, but the shale units are relatively impermeable. Groundwater generally can be obtained by drilling to depths of less than 200 feet, but the Pottsville aquifer generally yields less than 10 gallons per minute to wells.

The major groundwater aquifer in the area is the Pottsville Aquifer. Groundwater in the Pottsville Formation exists in the sandstone and in residual soils and in openings along joints, faults, and bedding planes. Except where fractured, the coal, shale and siltstone are relatively impermeable and usually do not yield significant quantities of water to wells. The water table ranges from 10 to 50 feet below the surface, and quantities of water suitable for domestic needs generally occur at depths of less than 200 feet. Yields to most wells in the area are less than 10 gallons per minute.

The source of recharge to the aquifers in the area is through rainfall. Average annual rainfall in the area is about 53 inches per year. A large part of this rainfall is lost either by direct runoff to streams immediately after a rain or by evapotranspiration to the atmosphere. A relatively small part of the total rainfall infiltrates to the water table to recharge the aquifers.

The permeability for the area is 1.4×10^{-3} to 4.2×10^{-3} and depth to shallowest aquifer is approximately 10 to 50 feet (Attachment C).

3.2 Ground Water Targets

There are 2 municipal wells within the 4-mile target distance. These two wells are owned by Southern Railway and their use is unknown. These wells lie close to the 4-mile radius to the west. There is also one spring used for public water supply approximately 4 miles east of the site. This spring is used by the City of Leeds and is pumped at a rate of approximately 750,000 gallons per day and serves 12,597 persons (Attachment C). There appear to be few private wells located within a 4 mile radius of the site; however, there is one residence within $\frac{1}{4}$ mile of the site to the northwest which does utilize groundwater for drinking and serves 6 persons (Attachment D). The remainder of the area is served by surface water from Lake Purdy.

3.3 Ground Water Conclusions

A release of hazardous materials to groundwater from this site is suspected due to the geology in the area in question being possibly unnaturally karst due to mining activities in the area and that contaminants released from the site are in liquid form and poorly managed. Upgradient monitoring wells are in place at an adjacent facility to the east – assumed to be on the property line. There are no monitoring wells on the Miller's Foundry site.

4. SURFACE WATER PATHWAY

4.1 Hydrologic Setting

The overland drainage from the site is to the northwest, west, southwest, and east. Drainage from the northwest enters into an intermittent stream at the back of the property. Western drainage has accumulated in a low area that was formerly a borrow ditch for an abandoned railroad which has now been removed. This area has formed a tar-like lagoon of waste material. Southwestern drainage is to a municipal drain. Paint wastes have been observed entering this drain and it is uncertain where this drain terminates. Eastern drainage is to a small impounded area which has cattails growing in it. The distance from the site to perennial surface water – Lake George – is approximately 1/3 mile, then 1.5 miles in an unnamed tributary to the Cahaba River (Attachment D). The Cahaba River has a flow of 7-day 2-year 8.8 cfs and 7-day 10-year 4.5 cfs (Reference 1). The site lies outside of the 500 year floodplain.

4.2 Surface Water Targets

There are no drinking water intakes located within the 15-mile target distance limit. The Cahaba River is classified as Outstanding Alabama Water, for fishing and wildlife, and for water-contact sports (Reference 2). There are few wetlands occurring within 15 downstream miles along the banks of the Cahaba River. Federally Endangered species which are known to inhabit the Cahaba River – 2 miles downstream from the site are the: Cahaba Shiner, Southern Clubshell, Southern Combshell, Upland Combshell, Triangular Kidneyshell, and the Coosa Moccasinshell. Federally Threatened species known to inhabit this area are the: Goldline Darter and Fine-Lined Pocketbook (Reference 3). There do not appear to be any overland sensitive environments for this area

4.3 Surface Water Conclusions

A release to surface water is suspected as the wastes were deposited as a liquid, and there is a well defined pathway leading to perennial surface water.

5. SOIL EXPOSURE AND AIR PATHWAYS

5.1 Physical Conditions

There are areas of unnaturally stressed vegetation at the site and numerous areas of stained soil apparent both on and off the property. The site is readily accessible to the public and persons from adjacent facilities have been seen using the area for exercise walking, and trespassers have been noted onsite as well.

5.2 Soil and Air Targets

There are no workers or residents onsite. The nearest residence is located less than 0.1 mile to the northwest. The nearest school is Roebuck Plaza School located more than 3 miles to the northwest (Attachment D). Wetlands are not anticipated to exist within the four-mile target distance limit. There are not expected to be any Federally Endangered Species for the soil or air pathway.

- Population Profile (collected from topographic maps and LandView)

Radii	Households	Residents*
onsite	0	0
0-1/4	5	13
1/4-1/2	38	99
1/2-1	95	247
1-2	1,317	3,424
2-3	904	2,350
3-4	<u>4,000</u>	<u>10,400</u>
total:	6,359	16,533

* 2.6 residents/household for Jefferson County (Attachment I)

5.3 Soil Exposure and Air Pathway Conclusions

There is a direct exposure threat for soil at the site for persons both on and off the property. There is also a release to air as odors have been currently reported on and in the vicinity of the site.

6. SUMMARY AND CONCLUSIONS

A high priority for further study is recommended at this site as it is suspected to be impacting all available pathways of groundwater, surface water, soil, and air.

Attachments

- A. Information from RCRA
- B. Local map from Jefferson County Map Book
- C. Hydrogeology Report
- D. Topographic Maps: Leeds, Irondale Quadrangles
- E. Site Photographs
- F. Site Map
- G. Letter referencing Bankruptcy of Jones Plumbing Inc. and Jones manufacturing Company, Inc.
- H. Jefferson County Map
- I. Selected Population and Housing Characteristics: 1990

References

1. Low-Flow and Flow-Duration Characteristics of Alabama Steams
2. ADEM, Water Use Classifications for Interstate and Intrastate Waters
3. Endangered and Threatened Species of the South-East United States, "Red Book"

APPENDIX C

SITE INSPECTION WORKSHEETS

This appendix consists of worksheets that can be used to generate an SI site score. Completion of these worksheets is not required, but the SI investigator must evaluate an SI score, either by these worksheets, PREscore, or other regional scoring tools.

The worksheets consists of instructions and data tables to be filled in with scores from HRS reference tables. The data tables may also call for Data Type and References.

Data Type: The Data Type columns should be filled in with an H, Q, or + if the data are HRS quality well documented. The Data Type column should be filled in with an E, X, or - if the data represents estimated, approximations, or are not fully documented. This type identifies data gaps for expanded SI to investigate

References: The Reference columns should be filled in with coded reference numbers. The numbered reference list should be attached or the numbering should be cross-referenced to the SI Narrative.

The SI investigator will need the current SCDM to complete these worksheets.

SITE INSPECTION WORKSHEETS

SITE LOCATION

CERCLIS ID NUMBER
AL0001923358

SITE NAME
Millers Foundry

ADDRESS
6220 Amber Hills Road

CITY
McCombs

STATE
Alabama

ZIP CODE
35173

TELEPHONE
NA

COORDINATES: LATITUDE and LONGITUDE
33.563681N 86.616563W

TOWNSHIP, RANGE, and SECTION

OWNER/OPERATOR IDENTIFICATION

OWNER
South Trust Bank

OPERATOR
Jones Plumbing

ADDRESS

101 Park Avenue

CITY

New York

STATE

ZIP CODE

TELEPHONE

STATE Ala.
New York

ZIP CODE

TELEPHONE
(212) 696-6199

SITE EVALUATION

AGENCY
Ala. Department of Environmental Management

INVESTIGATOR
Phillip Skaggs

CONTACT
Phillip Skaggs

TELEPHONE
334-260-2712

Site Description and Operational History: Provide a brief description of the site and its operational history. State the site name, owner, operator, type of facility and operations, size of property, active or inactive status, and years of waste generation. Summarize waste treatment, storage, or disposal activities that have or may have occurred at the site; note whether these activities are documented or alleged. Identify all source types and prior spills, floods, or fires. Summarize highlights of the PA and other investigations.

The Millers Foundry Site began operations sometime in the early 1950s, and ceased operations in December of 1995. The area of the site is approximately 2 acres with a minimal slope. On the western side of the property is a heavily wooded ridge made up of fill material and foundry sands. The remains of partially buried drums are visible in the face of the ridge. The visible drums in the slope are decayed, and have no contents in them. Near the base of this ridge is an old rail bed, that runs parallel with the ridge. Bordered by the rail bed and ridge is a low area that contains a black dip paint that has migrated from the site. The site proper is a large cement foundation with no buildings left standing. Approximately 2,000 cubic feet of used foundry sand, thirty one, 55 gallon drums, and approximately 4,000 gallons of dip paint mixed with foundry sands are on this foundation. The known past disposal practice was to place waste around the property and to have wastes and foundry sands removed by a local resident in a dump truck to be placed at various locations in the surrounding area. The local resident was interviewed at the Preliminary assessment stage of this investigation and confirmed this disposal method. One of the former disposal areas is being investigated as a CERCLA site under the name of McCombs dump. The amount of spillage and disposal is unknown.

The facility was operated most recently by Jones Plumbing Systems, Inc. and Jones Manufacturing Company, Inc. The site is currently owned by Southtrust Bank, due to bankruptcy. The property formerly housed the foundry building of 35,789 square feet which was sold for scrap by Southtrust Bank and dismantled by Western Steel Inc. The property is unsecured, and has several abandoned cars and a truck now on it. These vehicles have been abandoned after the initial site reconnaissance.

A search of ADEM's files shows no past regulatory history. The main materials used in processes at the facility were, foundry sands for casting and molding process, various metals for the pipes, resins for the molds, dip paints used for finished castings, solvents (mainly toluene) for cleaning and paint thinning.

The site and drainage pathways have been sampled in two separate investigations. The sampling data revealed levels of Nickel (24.8ppb), Chromium (984ppb), Arsenic (61.6ppb) and Toluene (35,768ppb) in the foundry sand piles and drums located on the foundation. (Ref.1) The sampling data in the drainage pathways showed no significant levels of these contaminants.(Ref. 1)

GENERAL INFORMATION (continued)

Site Sketch: Provided a sketch of the site. Indicate all pertinent features of the site and nearby environments including sources of wastes, areas of visible and buried wastes building, residences, access roads, parking areas, fences, fields, drainage patterns, water bodies, vegetation, wells, sensitive environments, and other features.

--

Please see topographic map, and attached pictures.

--

C-5

GENERAL INFORMATION (continued)

Source Description: Describe all sources at the site. Identify source type and relate to waste disposal operations. Provide source dimensions and the best available waste quantity information. Describe the condition of sources and all containment structures. Cite references.

SOURCE TYPES

Landfill: A man-made (by excavation or construction) or natural hole in the ground into which wastes have come to be disposed by backfilling, or by contemporaneous soil deposition with waste disposal.

Surface Impoundment: A natural topographic depression, man-made excavation, or diked area, primarily formed from earthen materials (lined or unlined) and designed to hold an accumulation of liquid wastes, wastes containing free liquids, or sludges not backfilled or otherwise covered; depression may be wet with exposed liquid or dry if deposited liquid has evaporated, volatilized or leached; structures that may be described as lagoon, pond, aeration pit, settling pond, tailings pond, sludge pit; also a surface impoundment that has been covered with soil after final deposition of waste materials.

Drum: A portable container designed to hold a standard 55-gallon volume of wastes.

Tank and Non-drum Container: Any device, other than a drum, designed to contain an accumulation of waste that provides structural support and is constructed primarily of fabricated materials (such as wood, concrete, steel, or plastic); any portable or mobile device in which waste is stored or otherwise handled.

Contaminated Soil: An area or volume of soil onto which hazardous substances have been spilled spread, disposed, or deposited.

Pile: Any non-containerized accumulation above the ground surface of solid, non-flowing waste; includes open dumps. Some types of waste piles are:

Chemical Waste Pile: A pile consisting primarily of discarded chemical products, by products, radioactive waste, or used or unused feedstocks

Scrap Metal or Junk Pile: A pile consisting primarily of scrap metal or discarded durable goods (such as appliances, automobiles, auto parts, batteries, etc.) composed of materials containing hazardous substances

Tailings Pile: A pile consisting primarily of any combination of overburden from a mining operation and tailings from a mineral mining, beneficiation, or processing operation.

Trash Pile: A pile consisting primarily of paper, garbage, or discarded non-durable goods containing hazardous substances.

Land Treatment: Landfarming or other method of waste management in which liquid wastes or sludges are spread over land and tilled, or liquids are injected at shallow depths into soils.

Other: Sources not in categories listed above.

GENERAL INFORMATION (continued)

Source Description: Include description of containment per pathway for ground water (see HRS Table 3-2), surface water (see HRS table 4-2), and air (see HRS table 6-3 and 6-9).

The sources on site consist of drums (filled with solvents and sand), storage tanks (containing black dip paint), sumps (containing paint and sands), and piles of contaminated foundry sands. The only containment for the ground water pathway for approximately half of these sources is the cement foundation on which they rest and the containers they are in. The portion of the sources to the west consisting of fill material and used foundry sands have no containment. The front of the site has a slight grade toward the road, and drains to a street sewer.

Hazardous Waste Quantity (HWQ) Calculation: SI Tables 1 and 2 (see HRS tables 2-5, 2-6, and 5-2)

Thirty one 50 gallon drums, Two approximately 150 gallon vats, one 400 gallon vat, in ground Sumps that are 180ft. X 5ft. X 6inches of sediment. Approximately 2000 cubic feet of foundry sands in piles, and ½ acre of fill material and sands mixed together. The total score for the sources incompletely contained is 100 (HWQ =100).

SI TABLE 1: HAZARDOUS WASTE QUANTITY (HWQ) SCORES FOR SINGLE SOURCE SITES

AND FORMULAS FOR MULTIPLE SOURCE SITES

		Single Source Sites	
(Column 1) Tier	(Column 2) Source Type	(Column 3) HWQ = 10	(Column 4) HWQ = 100
A Hazardous Constituent Quantity	N/A	HWQ = 1 If Hazardous Constituent Quantity data are complete HWQ = 10 If Hazardous Constituent Quantity data are not complete	> 100 to 10,000 lbs
B Hazardous Wastestream Quantity	N/A	≤ 500,000 lbs	>500,000 to 50 million lbs
C Volume	Landfill	≤ 6.75 million cubic feet ≤ 250,000 cubic yards	> 6.75mil to 675mil cu.ft > 250,000 to 25mil cu.yd
	Surface Impoundment	≤ 6,750 cubic feet ≤ 250 cubic yards	> 6750 to 675000 cu.ft. > 250 to 25,000 cu.yd.
	Drums	≤ 1,000 drums	> 1000 to 100000 drums
	Tanks and non-drum Containers	≤ 50,000 gallons	> 50,000 to 5mil gallons
	Contaminated soil	≤ 6.75 mil cubic feet ≤ 250,000 cubic yards	> 6.75mil to 675mil cu.ft >250000 to 25mil cu.yd
	Pile	≤ 6,750 cubic feet ≤ 250 cubic yards	> 6750 to 675000 cu.ft > 250 to 25000 cu. yd
	Other	≤ 6,750 cubic feet ≤ 250 cubic yards	> 6750 to 675000 cu. ft >250 to 25000 cu. yd
D Area	Landfill	≤ 340,000 sq. ft ≤ 7.8 acres	>340000 to 34mil sq.ft. > 7.8 to 780 acres
	Surface Impoundment	≤ 1,300 sq. ft ≤ 0.029 acres	>1300 to 130000 sq.ft. >0.029 to 2.9 acres
	Contaminated soil	≤ 3.4mil sq. ft ≤ 78 acres	>3.4mil to 340mil sq.ft. >78 to 7800 acres
	Pile	≤ 1,300 sq. ft ≤ 0.029 acres	>1300 to 130000 sq.ft. >0.029 to 2.9 acres
	Land treatment	≤ 27,000 sq. ft ≤ 0.62 acres	>27000 to 2.7mil sq.ft. >0.62 to 62 acres

Table 1 (continued)

Single source sites		Multiple source Sites	Source type	Tier
HWQ = 10000	HWQ=1000000	Divisor		
>10000 - 1mil lbs	>1mil lbs	lbs/1	N/A	A Hazardous Constituent Quantity
>50mil - 5bil lbs	>5bil lbs	lbs/5000	N/A	B Hazardous Wastestream Quantity
>675mil - 67.5bil >25mil - 2.5bil	>67.5bil >2.5bil	cu.ft./675000 cu.yd/2500	Landfill	C Volume
>675000-67.5mil >25000 - 2.5mil	>67.5mil >2.5mil	cu.ft/67.5 cu.yd/2.5	Surface Impoundment	
>100000 - 10mil	>10mil	drums/10	Drums	
>5mil-500mil	>500mil	gallons/500	Tanks and non- drum containers	
>675mil-67.5bil >25mil-2.5bil	>67.5bil >2.5bil	cu.ft/67500 cu.yd/2500	Contaminated soil	
>675000-67.5mil >25000-2.5mil	>67.5mil >2.5mil	cu.ft/67.5 cu.yd/2.5	Pile	
>675000-67.5mil >25000-2.5mil	>67.5mil >2.5mil	cu.ft/67.5 cu.yd/2.5	Other	
>34mil-3.4bil >780-78000	>3.4bil >78000	sq.ft/3400 acres/0.078	Landfill	D Area
>130000-13mil >2.9-290	>13mil >290	sq.ft/13 acres/0.00029	Surface Impoundment	
>340mil-34bil >7800-780000	>34bil >780000	sq.ft/34000 acres/0.78	Contaminated soil	
>130000-13mil >2.9-290	>13mil >290	sq.ft/13 acres/0.00029	Pile	
>2.7mil-270mil >62-6200	>270mil >6200	sq.ft/270 acres/0.0062	Land treatment	

C-9

HAZARDOUS WASTE QUANTITY (HWQ) CALCULATION

For each migration pathway, evaluate HWQ associated with sources that are available to migrate to that pathway. (Note: If **Actual Contamination Targets** exist for groundwater, surface water, or air migration pathways, assign the calculated HWQ score or 100, whichever is greater, as the HWQ score for that pathway.) For each source, evaluate HWQ for one or more of the four tiers (SI Table 1; HRS Table 2-5) for which data exist: constituent quantity, wastestream quantity, source volume, and source area. Select the tier that gives the highest value as the source HWQ. Select the source volume HWQ rather than source area HWQ if data for both tiers are available.

Column 1 of SI Table 1 indicates the quantity tier. Column 2 lists source types for the four tiers. Columns 3,4,5, and 6 provide ranges of waste amount for sites with only one source, corresponding to HWQ scores at the tops of the columns. Column 7 provides formulas to obtain source waste quantity values at sites with multiple sources.

1. Identify each source type
2. Examine all waste quantity data available for each source. Record constituent quantity and waste stream mass or volume. Record dimensions of each source.
3. Convert source measurements to appropriate units for each tier to be evaluated.
4. For each source, use the formulas in the last column of SI Table 1 to determine the waste quantity value for each tier that can be evaluated. Use the waste quantity value obtained from the highest tier as the quantity value for the source
5. Sum the values assigned to each source to determine the total site waste quantity.
6. Assign HWQ score from SI Table 2 (HRS Table 2-6)

Note these exceptions to evaluate soil exposure pathway HWQ (see HRS Table 5-2)

The divisor for the area (sq.ft) of a landfill is 34,000.

The divisor for the area (sq.ft) of a pile is 34.

Wet surface impoundments and tanks and non-drum containers are only sources for which volume measurements are evaluated for the soil exposure pathway.

SI Table 2: HWQ Score for sites

Site WQ Total	HWQ Score
0	0
1* to 100	1**
> 100 to 10,000	100
>10,000 to 1 million	10,000
> 1 million	1,000,000

- If the WQ total is between 0 and 1 round it to 1

** If the hazardous constituent quantity data are not complete, assign the score of 0

SI TABLE 3: WASTE CHARACTERIZATION WORKSHEET

Site Name: Millers Foundry

References: # 1, 2

Sources:

1. Used Foundry Sands
2. Sediment in sumps
3. Drums

Source	Haz. Sub	Toxicity	GW Path	SW Path							
			GW Mob	Tox Mob	Per	Tox/ Per	Bio Pot	Tox /Per/ Bio	Ecotox	Ecotox/ per	Ecotox/ Per/Bio
1,2	Arsenic	10,000	1	10,000	1	10,000	500	50,000	10	10	5000
3	Toluene	10	1	10	.4	4	50	200	100	40	2,000
1,2	Chromium	10,000	1	10,000	1	10,000	5	50,000	100	100	500
1,2	Nickel	10,000	.002	20	1	10,000	500	5,000,000	10	10	5,000

Groundwater Observed Release Substances Summary Table

On SI Table 4, list the hazardous substances associated with the site detected in groundwater samples for that aquifer. Include only those substances directly observed or with concentrations significantly greater than background levels. Obtain toxicity values from the SCDM. Assign mobility a value of 1 for all observed release substances regardless of the aquifer being evaluated. For each substance, multiply the toxicity by the mobility to obtain the toxicity/mobility factor value; enter the highest toxicity/mobility value for the aquifer in the space provided.

Groundwater Actual Contamination Targets Summary Table

If there is an observed release at a drinking water well, enter each hazardous substance meeting the requirements for an observed release by well and sample ID on SI table 5 and record the detected concentration. Obtain benchmark, cancer risk, and reference dose concentrations from SCDM. For MCL and MCLG benchmarks, determine the highest percentage of benchmark obtained for any substance. For cancer risk and reference dose, sum the percentages for the substances listed. If benchmark, cancer risk, or reference dose concentrations are not available for a particular substance, enter N/A for the percentage. If the highest benchmark percentage or the percentage sum calculated for cancer risk or reference dose equals or exceeds 100%, evaluate the population using the well as a level I target. If these percentages are less than 100% or all are N/A, evaluate the population using the well as a level II target for that aquifer.

SI TABLE 4: GROUNDWATER OBSERVED RELEASE SUBSTANCES (BY AQUIFER)

Sample ID	Haz. Substance	Bckgrd. Conc.	Toxicity/Mobility	References
NA				
Highest Tox/Mob				

No data shows a groundwater release has occurred at the site in question.

SI TABLE 5: GROUNDWATER ACTUAL CONTAMINATION TARGETS

Well ID: Well, # NA Level I: Level II: Pop. Ser.: Ref.: #

Sample ID	Haz.Sub.	Conc. PPB	Bench. Conc. MCL/MCLG	% of Bench	Cancer risk conc.	% of cancer risk conc.	RFD	% of RFD
NA								
Highest %					Sum of %		Sum of %	

Well ID: Level I: Level II: Pop. Ser.: Ref.

Sample ID	Haz.Sub.	Conc. PPB	Bench. Conc. MCL/MCLG	% of Bench.	Cancer risk conc.	% of cancer risk conc.	RFD	% of RFD
NA								
Highest %					Sum of %		Sum of %	

GROUNDWATER PATHWAY

GROUNDWATER USE DESCRIPTION

Describe groundwater use within 4 miles of the site: Describe generalized stratigraphy, aquifer, municipal and private wells.

The city wells for Leeds are part of an equal distribution system. Well Number 5, is in the target distance limit of four miles. The system of Leeds serves approximately 14,000 persons. Thus well No. # 5 serves approximately 2,333 persons. There are 6 persons on well water approximately ¼ mile from the site. Two industrial wells owned by Southern Railway are also known to be within the target distance limits.

The site is located in east Jefferson County in what is considered to be the Cahaba district of the Alabama Valley and Ridge physiographic section. The site has an estimated elevation of 620 feet above mean sea level. The Cahaba Ridge district consists of ridges underlain by gently folded sandstone and conglomerate beds, separated by valleys underlain by shale.

Soils at the site are classified as Palmerdale complex, steep with slopes ranging from 15 to 60 percent. This complex consists of steep, somewhat excessively drained Palmerdale soils and other soils on surface mining spoil piles. Typically, these soils are more than 60 inches thick and are dark gray very shaly silt loam.

The available water capacity for Palmerdale soils is low. These soils are not well suited to cultivated crops, pasture, and hay because of steep slopes, fragments on the surface, and the droughty nature of the soils. Present use of these soils is oriented primarily towards reclamation and establishment of trees.

Geologic units that crop out in this part of Jefferson County range in age from Cambrian to Pennsylvanian and are very complex in structure. Rocks in the vicinity of the site consist of the Pottsville Formation and are Pennsylvanian in age.

The Pottsville Formation consists of alternating beds of shale and sandstone with numerous coal seams and associated beds of clay. In parts of Jefferson County the Pottsville is over 5,100 feet thick, but in parts of the county it is of undermined thickness due to faulting and folding.

The Pottsville is characterized by steep and rugged valleys and ridges. The massive sandstone units are resistant to weathering and are often topographically higher than the shales that are more susceptible to erosion. The extent of weathering in the Pottsville primarily depends on the lithology of the rock unit. The shale may weather to depths of up to 20 feet and the sandstone to depths of up to 15 feet. The regolith derived from weathering of the shale generally is a silty loam containing shale fragments and has a slow infiltration rate.

Most of the permeability of the sandstone unit is the result of fractures in the bedrock. Some sandstone units of the Pottsville may be permeable, but the shale units are relatively impermeable. Groundwater generally can be obtained by drilling to depths of less than 200 feet, but the Pottsville aquifer generally yields less than 10 gallons per minute to wells.

The major groundwater aquifer in the area is the Pottsville Aquifer. Groundwater in the Pottsville Formation exists in the sandstone and in residual soils and in openings along joints, faults, and bedding planes. Except where fractured, the coal, shale and siltstone are relatively impermeable and usually do not yield significant quantities of water to wells. The water table ranges from 10 to 50 feet below the surface, and quantities of water suitable for domestic needs generally occur at depths of less than 200 feet. Yields to most wells in the area are less than 10 gallons per minute.

The source of recharge to the aquifers in the area is through rainfall. Average annual rainfall in the area is about 53 inches per year. A large part of this rainfall is lost either by direct runoff to streams immediately after a rain or by evapotranspiration to the atmosphere. A relatively small part of the total rainfall infiltrates to the water table to recharge the aquifers.

The permeability for the area is 1.4×10^{-3} and depth to shallowest aquifer is approximately 10 to 50 feet.

Show calculations of groundwater drinking water populations for each aquifer: Provide apportionment calculations for blended supply systems. As stated previously approximately 14,000 people are served by the Leeds water system. $14,000 / 6 \text{ wells in system} = 2,333 \text{ persons per well}$.

County average number of persons per household: 2.54

GROUNDWATER PATHWAY WORKSHEET

Data

Likelihood of release

Score Type Refs

1. OBSERVED RELEASE: If sampling data or direct observation support a release to the aquifer, assign a score of 550. Record observed release substances on SI Table 4.	NA		
2. POTENTIAL TO RELEASE: Depth to aquifer: <u>30</u> feet. If sampling data do not support a release to the aquifer, and the site is in karst terrain or the depth to aquifer is 70 feet or less, assign a score of 500; otherwise, assign a score of 340. Optionally, evaluate potential to release according to HRS Section 3.			
LR = 500			

Targets

Are any wells part of a blended system? Y <u>N</u> If yes, attach a page to show apportionment calculations.	NA		
3. ACTUAL CONTAMINATION TARGETS: If analytical evidence indicates that any target drinking water well for the aquifer has been exposed to a hazardous substance from the site, evaluate the factor score for the number of people served (SI Table 5). Level I: people x 10 = Level II: people x 1 =			
4. POTENTIAL CONTAMINATION TARGETS: Determine the number of people served by drinking water wells for the aquifer or overlying aquifers that are not exposed to a hazardous substance from the site; record the population for each distance category in SI Table 6a or 6b. Sum the population values and multiply by 0.1.	82.1		
5. NEAREST WELL: Assign a score of 50 for any Level I Actual Contamination Targets for the aquifer or overlying aquifer. Assign a score of 45 if there are Level II targets but no Level I targets. If no Actual Contamination Targets exist, assign the Nearest Well score from SI Table 6a or 6b. If no drinking water wells exist within 4 miles assign 0.	20		
6. WELLHEAD PROTECTION AREA (WHPA): If any source lies within or above a WHPA for the aquifer, or if a groundwater observed release has occurred within a WHPA, assign a score of 20; assign 5 if neither condition applies but a WHPA is within 4 miles; otherwise assign 0.	NA		
7. RESOURCES: Assign a score of 5 if one or more groundwater resource applies; assign 0 if none applies. - Irrigation (5 acre min) of commercial food crops or commercial forage crops - Watering of commercial livestock - Ingredient in commercial food preparation - Supply for commercial aquaculture - Supply for a major or designated water recreation area, excluding drinking water use	5		
Sum of Targets	107		

C-15

SI TABLE 6 (From HRS Table 3-12): Values for Pot. Contamination GW Target Pop.

SI Table 6a: Other Than Karst Aquifers

Population served by wells within distance category

Dis. from site	Pop.	Near Well	1 to 10	11 to 30	31 to 100	101 to 300	301 to 1000	1001 to 3000	3001 to 1.0E+4	10001 to 3.0E+4	30001 to 1.0E+5	>1.0E+5 to 3.0E+5	Pop. val.
0 to .25		20	4	17	53	164	522	1633	5214	16325	52137	163246	
.25 to .5		18	2	11	33	102	324	1013	3233	10122	32325	101213	
.5 to 1		9	1	5	17	52	167	523	1669	5224	16684	52239	
1 to 2		5	0.7	3	10	30	94	294	939	2939	9385	29384	
2 to 3		3	0.5	2	7	21	68	212	678	2122	6778	21222	
3 to 4		2	0.3	1	4	13	42	131	417	1306	4171	13060	
Nea rest	well		Sum =										

SI TABLE 6 (From HRS Table 3-12) Values for Pot. Contamination GW Target Pop.

SI Table 6b: Karst Aquifers

Population served by wells within distance category

Dis. From Site	Pop.	Near Well	1 to 10	11 to 30	31 to 100	101 to 300	301 to 1000	1001 to 3000	3001 to 1.0E+4	10001 to 3.0E+4	30001 to 1.0E+5	>1.0E+5 to 3.0E+5	Pop. val.
0 to .25	6	20	4	17	53	164	522	1633	5214	16325	52137	163246	4
.25 to .5		20	2	11	33	102	324	1013	3233	10122	32325	101213	
.5 to 1		20	2	9	26	82	261	817	2607	8163	26068	81623	
1 to 2		20	2	9	26	82	261	817	2607	8163	26068	81623	
2 to 3		20	2	9	26	82	261	817	2607	8163	26068	81623	
3 to 4	2333	20	2	9	26	82	261	817	2607	8163	26068	81623	817
Nearest	Well	20	Sum =										821

GROUNDWATER PATHWAY WORKSHEET (concluded)

Data

Waste Characteristics

Score Type

8. If any Actual Contamination Targets exist for the aquifer or overlying aquifers, assign the calculated hazardous waste quantity score or a score of 100, whichever is greater; if no Actual Contamination Targets exist, assign the hazardous waste quantity score calculated for sources available to migrate to groundwater.	100																							
9. Assign the highest groundwater toxicity/mobility value from SI Table 3 or 4.	10,000																							
10. Multiply the groundwater toxicity/mobility and hazardous waste quantity scores. Assign the Waste Characteristics score from the table below: (from HRS Table 2-7)																								
<table> <tr> <th>Product</th> <th>WC Score</th> </tr> <tr> <td>0</td> <td>0</td> </tr> <tr> <td>>0 to <10</td> <td>1</td> </tr> <tr> <td>10 to <100</td> <td>2</td> </tr> <tr> <td>100 to <1000</td> <td>3</td> </tr> <tr> <td>1000 to <10000</td> <td>6</td> </tr> <tr> <td>10000 to <1E+05</td> <td>10</td> </tr> <tr> <td>1E+05 to <1E+06</td> <td>18</td> </tr> <tr> <td>1E+06 to <1E+07</td> <td>32</td> </tr> <tr> <td>1E+07 to <1E+08</td> <td>56</td> </tr> <tr> <td>1E+08 or greater</td> <td>100</td> </tr> </table>	Product	WC Score	0	0	>0 to <10	1	10 to <100	2	100 to <1000	3	1000 to <10000	6	10000 to <1E+05	10	1E+05 to <1E+06	18	1E+06 to <1E+07	32	1E+07 to <1E+08	56	1E+08 or greater	100		
Product	WC Score																							
0	0																							
>0 to <10	1																							
10 to <100	2																							
100 to <1000	3																							
1000 to <10000	6																							
10000 to <1E+05	10																							
1E+05 to <1E+06	18																							
1E+06 to <1E+07	32																							
1E+07 to <1E+08	56																							
1E+08 or greater	100																							
WC=	32																							

Multiply LR by T and by WC. Divide the product by 82,500 to obtain the groundwater pathway score for each aquifer. Select the highest aquifer score.

If the pathway score is greater than 100, assign 100.

Groundwater Pathway Score: $\frac{LR \times T \times WC}{82,500}$

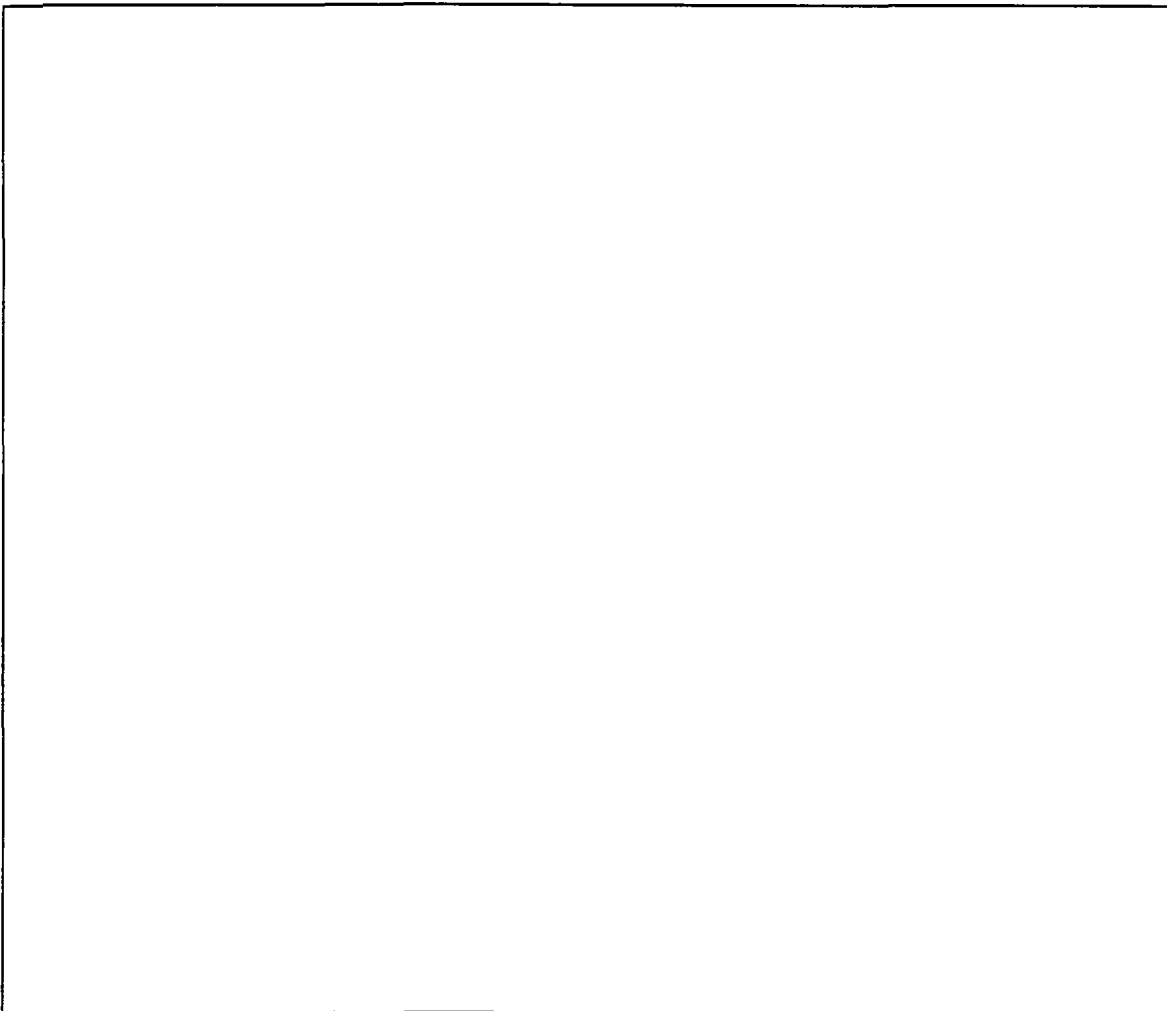
$$\frac{1,712,000}{82,500} = 20$$

=20

SURFACE WATER PATHWAY

Sketch of the Surface Water Migration Route:

Label all surface water bodies. Include runoff and drainage direction, probable point of entry, and 15-mile target distance limit. Mark sample locations, intakes, fisheries, and sensitive environments. Indicate flow directions, tidal influence, and rate. **Please see topographic maps.**



SURFACE WATER PATHWAY

Surface Water Observed Release Substance Summary Table

On SI Table 7, list hazardous substances detected in surface water samples for the watershed, which can be attributed to the site. Include only those substances in observed releases (direct observation) or with concentration levels significantly above background levels. Obtain toxicity, persistence, bioaccumulation potential, and ecotoxicity values from SCDM. Enter the highest toxicity/persistence, toxicity/persistence/bioaccumulation, and ecotoxicity/persistence/ecobioaccumulation values in the spaces provided:

- TP = Toxicity x persistence
- TPB = TP x bioaccumulation
- ETPB = EP x bioaccumulation (EP = ecotoxicity x persistence)

Drinking Water Actual Contamination Targets Summary Table

For an observed release at or beyond a drinking water intake, on SI Table 8 enter each hazardous substance by sample ID and the detected concentration. For surface water sediment detecting a hazardous substance at or beyond intake, evaluate the intake as level II contamination. Obtain benchmark, cancer risk, and reference dose concentrations for each substance from SCDM. For MCL and MCGL benchmark, determine the highest percentage of benchmark obtained for any substance. For cancer risk and reference dose, sum the percentages of the substances listed. If benchmark, cancer risk, or reference dose concentrations are not available for a particular substance, enter N/A for the percentage. If the highest benchmark percentage or the percentage sum calculated for cancer risk or reference dose equals or exceeds 100%, evaluate the population served by the intake as a Level I target. If the percentages are less than 100% or all are N/A, evaluate the population served by the intake as a Level II target.

SI TABLE 7: SURFACE WATER OBSERVED RELEASE SUBSTANCES

Sample ID	Haz. Substance	Bckgrd. Conc.	Toxicity/Per.	Tox/Per /Bio	Ecotox/Per /Ecobio	Ref.
NA						
Highest Tox/Mob						

SI TABLE 8: SURFACE WATER DRINKING WATER ACTUAL CONTAMINATION TARGETS

Intake ID: NA Sample type: Level I: Level II: Pop. served.: Ref.:

Sample ID	Haz.Sub.	Conc. PPB	Bench. conc. MCL/MCLG	% of Bench	Cancer risk conc.	% of cancer risk conc.	RFD	% of RFD
NA								
Highest %					Sum of %		Sum of %	

Intake ID: NA Sample type: Level I: Level II: Pop. ser.: Ref.:

Sample ID	Haz.Sub.	Conc. PPB	Bench. conc. MCL/MCLG	% of Bench.	Cancer risk conc.	% of cancer risk conc.	RFD	% of RFD
NA								
Highest %					Sum of %		Sum of %	

SURFACE WATER PATHWAY

LIKELIHOOD OF RELEASE- OVERLAND/FLOOD MIGRATION

	Score	Data Type	Ref
1. OBSERVED RELEASE: If sampling data or direct observation support a release to surface water in the watershed, assign a score of 550. Record observed release substances on SI Table 7.	NA		
2. POTENTIAL TO RELEASE: Distance to surface water: 80 feet . If sampling data do not support a release to surface water in the watershed, use the table below to assign a score.	500		
Score			
Distance to surface water <2500 feet			
Distance to surface water >2500 feet and			
Site in annual or 10 yr floodplain			
Site in 100 yr floodplain			
Site in 500 yr floodplain			
Site outside 500 yr floodplain			
Optionally, evaluate surface water potential to release according to HRS Section 4.1.2.1.2			
LR =	500		

LIKELIHOOD OF RELEASE GROUNDWATER TO SURFACE WATER MIGRATION

	Score	Data Type	Ref
1. OBSERVED RELEASE: If sampling data or direct observation support a release to surface water in the watershed, assign a score of 550. Record observed release substances on SI Table 7.	Na		
Note: Evaluate groundwater to surface water migration only for a surface water body that meets all of the following conditions:			
1. A portion of the surface water is within 1 mile of site sources having a containment factor greater than 0.			
2. No aquifer discontinuity is established between the source and the above portion of the surface water body.			
3. The top of the uppermost aquifer is at or above the bottom of the surface water.			
Elevation of top of uppermost aquifer:			
Elevation of bottom of surface water body:			
2. POTENTIAL TO RELEASE: Use the groundwater potential to release. Optionally, evaluate surface water potential to release according to HRS Section 3.1.2			
LR =	00		

C-23

SURFACE WATER PATHWAY

LIKELIHOOD OF RELEASE AND DRINKING WATER THREAT WORKSHEET
(CONTINUED)

DRINKING WATER THREAT TARGETS

Record the water body type, flow, and number of people served by each drinking water intake within the target distance limit in the watershed. If there is no drinking water intake within the target distance limit, assign 0 to factors 3, 4, and 5.	NA		
<p><u>Intake Name Water Body Type Flow Pop. Served</u></p> <p>Are any intakes part of a blended system? Y N If yes, attach a page to show apportionment calculations.</p> <p>3. ACTUAL CONTAMINATION TARGETS: If analytical evidence indicates a drinking water intake has been exposed to a hazardous substance from the site, list the intake name and evaluate the factor score for the drinking water population (SI Table 8)</p> <p>Level I: people x 10 = Level II: people x 1 = Total =</p>			
4. POTENTIAL CONTAMINATION TARGETS: Determine the number of people served by drinking water intakes for the watershed that have not been exposed to a hazardous substance from the site. Assign the population values from SI Table 9. Sum the values and multiply by 0.1.	0		
5. NEAREST INTAKE: Assign a score of 50 for any Level I Actual Contamination Drinking Water Targets for the watershed. Assign a score of 45 if there are Level II targets for the watershed, but no Level I targets. If no Actual Contamination Drinking Water Targets exist, assign a score for the intake nearest the PPE from SI Table 9. If no drinking water intakes exist, assign 0.	NA		
6. RESOURCES: Assign a score of 5 if one or more surface water resource applies; assign 0 if none applies. -Irrigation (5 acre minimum) of commercial food crops or commercial forage crops -Watering of commercial livestock -Ingredient in commercial food preparation -Major or designated water recreation area, excluding drinking water use	5		
SUM OF TARGETS =	5		

No Drinking Water intakes are within the 15 mile target distance limit.

SI TABLE 9 (From HRS 4-14): DILUTION-WEIGHTED POP. VALUES FOR POTENTIAL CONTAMINATION FOR SURFACE WATER MIGRATION PATHWAY

Number of people

CFS/Water Body	Pop.	Near intake	1 to 10	11 to 30	31 to 100	101 to 300	301 to 1000	1001 to 3000	3001 to 10000	10001 to 30000	Pop. Value
<10 cfs		20	4	17	53	164	522	1633	5214	16325	
10 to 100 cfs		2	.4	2	5	16	52	163	521	1633	
>100 to 1000 cfs		0	.04	.2	.5	2	5	16	52	163	
>1000 to 10000 cfs		0	.004	.02	.05	.2	.5	2	5	16	
>10000 to 100000 cfs		0	0	.002	.005	.02	.05	.2	.5	16	
>100000 cfs		0	0	0	.001	.002	.005	.02	.05	.2	
Shallow ocean zone or Great Lake (depth <20 feet)		0	0	.002	.005	.02	.05	.2	.5	2	
Moderate ocean zone or Great Lake (depth 20 to 200 feet)		0	0	0	.001	.002	.005	.02	.05	.2	
Deep ocean zone or Great Lake (depth > 200 feet)		0	0	0	0	.001	.003	.008	.03	.08	
3 mile mixing zone in quiet flowing river (> 10 cfs)		10	2	9	26	82	261	817	2607	8163	
Nearest intake		na									Sum =

No Drinking Water intakes within the 15 mile target distance limit.

SURFACE WATER PATHWAY

Human Food Chain Actual Contamination Targets Summary Table

On SI Table 10, list the hazardous substance detected in sediment, aqueous, sessile benthic organism tissue, or fish tissue samples (taken from fish caught within the boundaries of the observed release) by sample ID and concentration. Evaluate fisheries within the boundaries of observed release detected by sediment or aqueous samples as Level II, if at least one observed release substance has a bioaccumulation potential factor value of 500 or greater (see SI Table 7). Obtain benchmark, cancer risk, and reference dose concentrations from SCDM. For FDAAL benchmarks, determine the highest percentage of benchmark obtained for any substance. For cancer risk and reference dose, sum the percentages for the substances listed. If benchmark, cancer risk, or reference dose concentrations are not available for a particular substance, enter N/A for the percentage. If the highest benchmark percentage sum calculated for cancer risk or reference dose equals or exceeds 100%, evaluate this portion of the fishery as subject to Level I concentrations. If the percentages are less than 100% or all are N/A, evaluate the fishery as a Level II target.

Sensitive Environment Actual Contamination Targets Summary Table

On SI Table 11, list each hazardous substance detected in aqueous or sediment samples at or beyond wetlands or a surface water sensitive environment by sample ID. Record the concentration. If contaminated sediments or tissues are detected at or beyond a sensitive environment, evaluate the sensitive environment as Level II. Obtain benchmark concentrations from SCDM. For AWQC/AALAC benchmarks, determine the highest percentage of benchmark of the substances detected in aqueous samples. If benchmark concentrations are not available for a particular substance, enter N/A for the percentage. If highest benchmark percentage equals or exceeds 100%, evaluate that part of the sensitive environment subject to Level I concentrations. If the percentage is less than 100%, or all are N/A, evaluate the sensitive environment as Level II.

SI TABLE 10: HUMAN FOOD CHAIN ACTUAL CONTAMINATION TARGETS FOR WATERSHED

SI TABLE 11: SENSITIVE ENVIRONMENT ACTUAL CONTAMINATION TARGETS FOR WATERSHED No sample data, shows release of contaminants to watershed.

Envir. ID:na Sample Type: Level I: Level II: Envir. Val:

Sample ID	Hazardous Substance	Conc. PPB	Bench. Conc. AWQC or AALAC	% of Bench.	Ref.
Highest %				0	

Envir. ID: Sample Type: Level I: Level II: Envir. Val:

Sample ID	Hazardous Substance	Conc. PPB	Bench. Conc. AWQC or AALAC	% of Bench.	Ref.
Highest %					

SURFACE WATER PATHWAY (continued)

HUMAN FOOD CHAIN THREAT WORKSHEET

Human Food Chain Threat Targets

Record the water body type and flow for each fishery within the target distance limit. If there is no fishery within the target distance limit, assign a score of 0 at the bottom of this page.													
Fishery Name: Cahaba River Water Body: Minimal stream Flow: 8.8 cfs Species: Production: unknown lbs/yr Species: Production: lbs/yr													
Fishery Name: Water Body: Flow: Species: Production: lbs/yr Species: Production: lbs/yr													
FOOD CHAIN INDIVIDUAL 7. ACTUAL CONTAMINATION FISHERIES If analytical evidence indicates that a fishery has been exposed to a hazardous substance with a bioaccumulation factor greater than or equal to 500 (SI Table 10), assign a score of 50 if there is a Level I fishery. Assign 45 if there is a Level II fishery, but no Level I fishery. 8. If there is a release of a substance with a bioaccumulation factor greater than or equal to 500 to a watershed containing fisheries within the target distance limit, but there are no Level I or Level II fisheries, assign a score of 20. If there is no observed release to the watershed, assign a value for potential contamination fisheries from the table below using the lowest flow at all fisheries within the target distance limit:													
<table border="1"> <thead> <tr> <th>Lowest Flow</th> <th>FCI Value</th> </tr> </thead> <tbody> <tr> <td><10 cfs</td> <td>20</td> </tr> <tr> <td>10 to 100 cfs</td> <td>2</td> </tr> <tr> <td>>100 cfs, coastal tidal waters, oceans, or Great Lakes</td> <td>0</td> </tr> <tr> <td>3- mile mixing zone in quiet flowing river</td> <td>10</td> </tr> </tbody> </table>		Lowest Flow	FCI Value	<10 cfs	20	10 to 100 cfs	2	>100 cfs, coastal tidal waters, oceans, or Great Lakes	0	3- mile mixing zone in quiet flowing river	10	20	
Lowest Flow	FCI Value												
<10 cfs	20												
10 to 100 cfs	2												
>100 cfs, coastal tidal waters, oceans, or Great Lakes	0												
3- mile mixing zone in quiet flowing river	10												
FCI Value = SUM OF TARGETS =		20											

C-28

SURFACE WATER PATHWAY (continued)

ENVIRONMENTAL THREAT WORKSHEET

Environmental Threat Targets

Record the water body type and flow for each surface water sensitive environment within the target distance (see SI Table 12). If there is no sensitive environment within the target distance limit, assign a score of 0 at the bottom of the page.					37.5																																					
<u>Environment Name</u>		<u>Water Body Type</u>	<u>Flow (cfs)</u>																																							
Cahaba		Minimal stream	Less than 10																																							
<p>9. ACTUAL CONTAMINATION SENSITIVE ENVIRONMENTS: If sampling data or direct observation indicate any sensitive environment has been exposed to a hazardous substance from the site, record this information on SI Table, and assign a factor value for the environment (SI Table 13 and 14).</p>																																										
<u>Environment Name</u>		<u>Type and value</u>	<u>Multiplier</u>	<u>Product</u>																																						
<p>10. POTENTIAL CONTAMINATION SENSITIVE ENVIRONMENTS</p> <table border="1"> <thead> <tr> <th>Flow</th> <th>Dilution (SI table 12)</th> <th>Type and Value</th> <th>Pot Cont.</th> <th>Product</th> </tr> </thead> <tbody> <tr> <td><10</td> <td>1 X 75</td> <td></td> <td>0.1</td> <td>7.5</td> </tr> <tr> <td><10</td> <td>1 X 75</td> <td></td> <td>0.1</td> <td>7.5</td> </tr> <tr> <td><10</td> <td>1 X 75</td> <td></td> <td>0.1</td> <td>7.5</td> </tr> <tr> <td><10</td> <td>1 X 75</td> <td></td> <td>0.1</td> <td>7.5</td> </tr> <tr> <td><10</td> <td>1 X 75</td> <td></td> <td>0.1</td> <td>7.5</td> </tr> <tr> <td colspan="4"></td> <td>Sum =</td> </tr> </tbody> </table>					Flow	Dilution (SI table 12)	Type and Value	Pot Cont.	Product	<10	1 X 75		0.1	7.5	<10	1 X 75		0.1	7.5	<10	1 X 75		0.1	7.5	<10	1 X 75		0.1	7.5	<10	1 X 75		0.1	7.5					Sum =			
Flow	Dilution (SI table 12)	Type and Value	Pot Cont.	Product																																						
<10	1 X 75		0.1	7.5																																						
<10	1 X 75		0.1	7.5																																						
<10	1 X 75		0.1	7.5																																						
<10	1 X 75		0.1	7.5																																						
<10	1 X 75		0.1	7.5																																						
				Sum =																																						
SUM OF TARGETS =					37.5																																					

C-29

SI TABLE 12 (HRS Table 4-13)

SURFACE WATER DILUTION WEIGHTS

Type of Surface Water Body		Assigned Dilution Weight
Descriptor	Flow Characteristics	
Minimal stream	<10 cfs	1
Small to moderate stream	10 to 100 cfs	0.1
Moderate to large stream	>100 to 1000 cfs	0.01
Large stream to river	>1000 to 10000 cfs	0.001
Large River	>10000 to 100000 cfs	0.0001
Very large river	> 100000 cfs	0.00001
Coastal tidal waters	N/A	0.001
Shallow ocean zone or Great Lake	Flow N/A; depth less than 20 feet	0.001
Moderate depth ocean zone or Great Lake	Flow N/A; depth 20 to 200 feet	0.0001
Deep ocean zone or Great Lake	Flow N/A; depth greater than 200 feet	0.000005
3-mile mixing zone in quiet flowing river	10 cfs or greater	0.5

SI TABLE 13 (HRS TABLE 4-23)

SURFACE WATER AND AIR SENSITIVE ENVIRONMENTS VALUES

SENSITIVE ENVIRONMENT	ASSIGNED VALUE
Critical habitat for Federal designated endangered or threatened species Marine Sanctuary National Park Designated Federal Wilderness Area Ecologically important areas identified under the Coastal Zone Wilderness Act Sensitive Areas identified under the National Estuary Program or Near Coastal Water Program of the Clean Water Act Critical Areas identified under the Clean Lakes Program of the Clean Water Act (subareas inlakes or entire small lakes) National Monument (air pathway only) National Seashore Recreation Area National Lakeshore Recreation Area	100
Habitat known to be used by Federal designated or proposed endangered or threatened species National Preserve National or State Wildlife Refuge Unit of Coastal Barrier Resources System Coastal Barrier (undeveloped) Federal land designated for the maintenance of fish/shellfish species within a river system, bay, or estuary Migratory pathways and feeding areas critical for the maintenance of anadromous fish species within river reaches or areas in lakes or coastal tidal waters in which the fish spend extended periods of time Terrestrial areas utilized by large or dense aggregations of vertebrate animals (semi-aquatic foragers) for breeding National river reach designated as recreational	75
Habitat known to be used by State designated endangered or threatened species Habitat known to be used by a species under review as to its Federal endangered or threatened status Coastal Barrier (partially developed) Federally designated Scenic or Wild River	50
State land designated for wildlife or game management State designated Scenic or Wild River State designated Natural Area Particular areas, relatively small in size, important to maintenance of unique biotic communities	25
State designated areas for the protection of maintenance of aquatic life under the Clean Water Act	5
Wetlands see SI Table 14 (SW pathway) or SI Table 23 (Air pathway)	

SI TABLE 14 (HRS TABLE 4-24): SURFACE WATER WETLANDS FRONTAGE VALUES

Total Length of Wetlands	Assigned Values
Less than 0.1 mile	0
0.1 to 1 mile	25
>1 to 2 miles	50
>2 to 3 miles	75
>3 to 4 miles	100
>4 to 8 miles	150
>8 to 12 miles	250
>12 to 16 miles	350

WASTE CHARACTERISTICS, THREAT, AND PATHWAY SCORE SUMMARY

Score

14. If any Actual Contamination Targets (drinking water, human food chain, or environmental threat) exist for the watershed, assign the calculated hazardous waste quantity score or a score of 100, whichever is greater.	100																														
15. Assign the highest value from SI Table 7 or SI Table 3 for the hazardous substance waste characterization factors below. Multiply each by the surface water hazardous waste quantity score and determine the waste characteristics score for each threat																															
<table><tr><td>Substance</td><td>Value</td><td>HWQ</td><td>Product</td></tr><tr><td>Drinking Water Tox/Per</td><td>10,000</td><td>100</td><td>10,0000</td></tr><tr><td>Food Chain Tox/Per/Bio</td><td>5,000,000</td><td>100</td><td></td></tr><tr><td>Environmental Ecotox/Per/Ecobio</td><td>5,000,000</td><td>100</td><td></td></tr></table>	Substance	Value	HWQ	Product	Drinking Water Tox/Per	10,000	100	10,0000	Food Chain Tox/Per/Bio	5,000,000	100		Environmental Ecotox/Per/Ecobio	5,000,000	100		<table><tr><td>32</td></tr><tr><td>100</td></tr><tr><td>32</td></tr></table>	32	100	32											
Substance	Value	HWQ	Product																												
Drinking Water Tox/Per	10,000	100	10,0000																												
Food Chain Tox/Per/Bio	5,000,000	100																													
Environmental Ecotox/Per/Ecobio	5,000,000	100																													
32																															
100																															
32																															
<table><tr><td>Product</td><td>WC Score</td></tr><tr><td>0</td><td>0</td></tr><tr><td>>0 to <10</td><td>1</td></tr><tr><td>10 to <100</td><td>2</td></tr><tr><td>100 to <1000</td><td>3</td></tr><tr><td>1000 to <10000</td><td>6</td></tr><tr><td>10000 to <1E+05</td><td>10</td></tr><tr><td>1E+05 to <1E+06</td><td>18</td></tr><tr><td>1E+06 to <1E+07</td><td>32</td></tr><tr><td>1E+07 to <1E+08</td><td>56</td></tr><tr><td>1E+08 to <1E+09</td><td>100</td></tr><tr><td>1E+09 to <1E+10</td><td>180</td></tr><tr><td>1E+10 to <1E+11</td><td>320</td></tr><tr><td>1E+11 to <1E+12</td><td>560</td></tr><tr><td>1E+12 or greater</td><td>1000</td></tr></table>	Product	WC Score	0	0	>0 to <10	1	10 to <100	2	100 to <1000	3	1000 to <10000	6	10000 to <1E+05	10	1E+05 to <1E+06	18	1E+06 to <1E+07	32	1E+07 to <1E+08	56	1E+08 to <1E+09	100	1E+09 to <1E+10	180	1E+10 to <1E+11	320	1E+11 to <1E+12	560	1E+12 or greater	1000	
Product	WC Score																														
0	0																														
>0 to <10	1																														
10 to <100	2																														
100 to <1000	3																														
1000 to <10000	6																														
10000 to <1E+05	10																														
1E+05 to <1E+06	18																														
1E+06 to <1E+07	32																														
1E+07 to <1E+08	56																														
1E+08 to <1E+09	100																														
1E+09 to <1E+10	180																														
1E+10 to <1E+11	320																														
1E+11 to <1E+12	560																														
1E+12 or greater	1000																														

Threat	LR	Targets	WC	Threat Score
Drinking Water	500	5	32	1.0
Human Food Chain	500	20	100	12.12
Environmental	500	37.5	32	4
SW Pathway Score				17.12

SOIL EXPOSURE PATHWAY

If there is no observed contamination (e.g., ground water plume with no surface source), do not evaluate the soil exposure pathway. Discuss evidence for no soil exposure pathway.

Soil Exposure Resident Population Targets Summary

For each property (duplicate page 35 as necessary)

IF there is an area of observed contamination on the property and within 200 feet of a residence, school, or day care center, enter on Table 15 each hazardous substance by sample ID. Record the detected concentration. Obtain cancer risk, and reference dose concentrations from SCDM. Sum the cancer risk and reference dose percentages for the substance listed. If cancer risk or reference dose concentrations are not available for a particular substance, enter N/A for the percentage. If the percentage sum calculated for cancer risk or reference dose equals or exceeds 100%, evaluate the residents and students as Level I. If both are less than 100% or all are N/A, evaluate the targets as Level II.

The site is abandoned, and presently there are no workers, nor security guards on site. The area is readily accessible to the public. Several vehicles have been abandoned on the site and some garbage has been dumped. The following is the population profile for radii.

Radii	Residents
Onsite	0
0-1/4	13
1/4-1/2	99
1/2-1	247
1-2	3,424
2-3	2,350
3-4	10,400

SI TABLE 15: SOIL EXPOSURE RESIDENT POPULATION TARGETS

Residence ID:

Level I:

Level II:

Pop:

Sample ID	Haz.Sub.	Conc. PPM	Cancer risk conc.	% of cancer risk conc.	RFD	% of RFD	Toxicity Value
NA							
			Highest %		Sum of %		Sum of %

Residence ID:

Level I:

Level II:

Pop:

Sample ID	Haz.Sub.	Conc. PPM	Cancer risk conc.	% of cancer risk conc.	RFD	% of RFD	Toxicity Value
			Highest %		Sum of %		Sum of %

Residence ID:

Level I:

Level II:

Pop:

Sample ID	Haz.Sub.	Conc. PPM	Cancer risk conc.	% of cancer risk conc.	RFD	% of RFD	Toxicity Value
			Highest %		Sum of %		Sum of %

SOIL EXPOSURE PATHWAY WORKSHEET

RESIDENT POPULATION THREAT

Data

Likelihood of Exposure

Score Type Refs

1. OBSERVED RELEASE: If evidence indicates presence of observed contamination (depth of 2 feet or less), assign a score of 550; otherwise, assign 0. Note that a likelihood of exposure score of 0 results in a soil exposure pathway score of 0.			
LE =	550		

Targets

2. RESIDENT POPULATION: Determine the number of people occupying residences or attending school or day care on or within 200 feet of areas of observed contamination (HRS section 5.1.3). Level I: people x 10 = 0 Level II: people x 6 = 0 <div>Sum</div> =	0												
3. RESIDENT INDIVIDUAL: Assign a score of 50 if any Level I resident population exists. Assign a score of 45 if there are Level II targets but no Level I targets. If no resident population exist assign 0 (HRS Section 5.1.3)	0												
4. WORKERS: Assign a score from the table below for the total number of workers at the site and nearby facilities with areas of observed contamination associated with the site. <table><tr><td>Number or Workers</td><td>Score</td></tr><tr><td>0</td><td>0</td></tr><tr><td>1 to 100</td><td>5</td></tr><tr><td>101 to 1000</td><td>10</td></tr><tr><td>> 1000</td><td>15</td></tr></table>	Number or Workers	Score	0	0	1 to 100	5	101 to 1000	10	> 1000	15	0		
Number or Workers	Score												
0	0												
1 to 100	5												
101 to 1000	10												
> 1000	15												
5. TERRESTRIAL SENSITIVE ENVIRONMENTS: Assign a value for each terrestrial sensitive environment (SI Table 16) in an area of observed contamination. <table><tr><td>Terrestrial Sensitive Environment Type</td><td>Value</td></tr></table>	Terrestrial Sensitive Environment Type	Value	0										
Terrestrial Sensitive Environment Type	Value												
6. RESOURCES: Assign a score of 5 if any one or more of the following resources is present on an area of observed contamination at the site; assign 0 if none applies. -Commercial agriculture -Commercial silviculture -Commercial livestock production or commercial livestock grazing	0												
Sum of Targets	0												

C-36

SI TABLE 16 (HRS TABLE 5-5): SOIL EXPOSURE PATHWAY

TERRESTRIAL SENSITIVE ENVIRONMENT VALUES

TERRESTRIAL SENSITIVE ENVIRONMENT	ASSIGNED VALUE
Terrestrial critical habitat for Federal designated endangered or threatened species National Park Designated Federal Wilderness Area National Monument (air pathway only)	100
Terrestrial habitat known to be used by Federal designated or proposed endangered or threatened species National Preserve (terrestrial) National or State terrestrial Wildlife Refuge Federal land designated for the protection of natural ecosystems Administratively proposed Federal Wilderness Area Terrestrial areas utilized by large or dense aggregations of vertebrate animals (semi-aquatic foragers) for breeding	75
Terrestrial habitat known to be used by State designated endangered or threatened species Terrestrial habitat known to be used by a species under review as to its Federal endangered or threatened status	50
State land designated for wildlife or game management State designated Natural Areas Particular areas, relatively small in size, important to maintenance of unique biotic communities	25

SOIL EXPOSURE PATHWAY WORKSHEET

NEARBY POPULATION THREAT

Data

Likelihood of Exposure

Score Type Refs

7. Attractiveness/Accessibility (from SI Table 17 or HRS Table 5-6)	Value 10			
Area of Contamination (from SI Table 18 or HRS Table 5-7)	Value 20			
Likelihood of Exposure(SI Table 19)				
LE =		5		

Data

Targets

Score Type Ref.

8. Assign a score of 0 if Level I or Level II resident individual has been evaluated or if no individuals live within ¼ mile travel distance of an area of observed contamination. Assign a score of 1 if nearby population is within ¼ mile travel distance and no Level I or Level II resident population has been evaluated.	1		
9. Determine the population within 1 mile travel distance that is not exposed to a hazardous substance from the site (i.e., properties that are not determined to be Level I or Level II); record the population for each distance category in SI Table 20 (HRS table 5-10). Sum the population values and multiply by 0.1	.21		
Targets =		1.21	

SI TABLE 17 (HRS TABLE 5-6):

ATTRACTIVENESS/ACCESSIBILITY VALUES

Area of Observed Contamination	Assigned Value
Designated recreational area	100
Regularly used for public recreation (for example, vacant lots in urban area)	75
Accessible and unique recreational area (for example, vacant lots in urban area)	75
Moderately accessible (may have some access improvements-for example gravel road) with some public recreation use	50
Slightly accessible (for example, extremely rural area with no road improvement) with some public recreation use	25
Accessible with no public recreation use	10
Surrounded by maintained fence or combination of maintained fence and natural barriers	5
Physically inaccessible to public, with no evidence of public recreation use	0

SI TABLE (HRS TABLE 5-7):

AREA OF CONTAMINATION FACTOR VALUES

Total area of the areas of observed contamination (square feet)	Assigned Value
\leq to 5000	5
> 5000 to 125000	20
> 125000 to 250000	40
> 250000 to 375000	60
> 375000 to 500000	80
> 500000	100

SI TABLE 19 (HRS TABLE 5-8):

NEARBY POPULATION LIKELIHOOD OF EXPOSURE VALUES

Area of Contamination

Factor Value	Attractiveness/Accessibility Factor Value						
	100	75	50	25	10	5	0
100	500	500	375	250	125	50	0
80	500	375	250	125	50	25	0
60	375	250	125	50	25	5	0
40	250	125	50	25	5	5	0
20	125	50	25	5	5	5	0
5	50	25	5	5	5	5	0

SI TABLE 20 (HRS TABLE 5-10):

DISTANCE-WEIGHTED POPULATION VALUES FOR NEARBY POPULATION THREAT

Number of people within the travel distance category

Dis. from site	Pop.		1 to 10	11 to 30	31 to 100	101 to 300	301 to 1000	1001 to 3000	3001 to 1.0E+4	10001 to 3.0E+4	30001 to 1.0E+5	>1.0E+5 to 3.0E+5	Pop. Val.
0 to .25	13	0	.1	.4	1.0	4	13	41	130	408	1303	13034	.4
.25 to .5	99	0	.05	.2	.7	2	7	20	65	204	652	6517	.7
.5 to 1	247	0	.02	.1	.3	1	3	10	33	102	326	1020	2
Sum =													2.1

SOIL EXPOSURE PATHWAY WORKSHEET (concluded)

Waste Characteristics

10. Assign the hazardous waste quantity score calculated for soil exposure	100																						
11. Assign the highest toxicity value from SI Table 16	1000 0																						
12. Multiply the toxicity and hazardous waste quantity scores. Assign the Waste Characteristic score from the table below:																							
<table> <tr> <td>Product</td><td>WC Score = 32</td></tr> <tr> <td>0</td><td>0</td></tr> <tr> <td>>0 to <10</td><td>1</td></tr> <tr> <td>10 to <100</td><td>2</td></tr> <tr> <td>100 to <1000</td><td>3</td></tr> <tr> <td>1000 to <10000</td><td>6</td></tr> <tr> <td>10000 to <1E+05</td><td>10</td></tr> <tr> <td>1E+05 to <1E+06</td><td>18</td></tr> <tr> <td>1E+06 to <1E+07</td><td>32</td></tr> <tr> <td>1E+07 to <1E+08</td><td>56</td></tr> <tr> <td>1E+08 or greater</td><td>100</td></tr> </table>	Product	WC Score = 32	0	0	>0 to <10	1	10 to <100	2	100 to <1000	3	1000 to <10000	6	10000 to <1E+05	10	1E+05 to <1E+06	18	1E+06 to <1E+07	32	1E+07 to <1E+08	56	1E+08 or greater	100	
Product	WC Score = 32																						
0	0																						
>0 to <10	1																						
10 to <100	2																						
100 to <1000	3																						
1000 to <10000	6																						
10000 to <1E+05	10																						
1E+05 to <1E+06	18																						
1E+06 to <1E+07	32																						
1E+07 to <1E+08	56																						
1E+08 or greater	100																						

Resident population threat score	LR	Targets	WC	Threat Score
(Likelihood of Exposure, question 1; Targets = Sum of questions 2,3,4,5,6)	550	0	32	0
Nearby population threat score	LR	Targets	WC	Threat Score
(Likelihood of Exposure, question 7; Targets = Sum of question 8,9)	5	1.2	32	192
Pathway Score				0.002

SITE SCORE CALCULATION

S

S(2)

Groundwater Pathway	20	400
Surface Water Pathway	17.12	293
Soil Exposure Pathway	0	0
Air Pathway	Na	Na
Site Score	13.15	

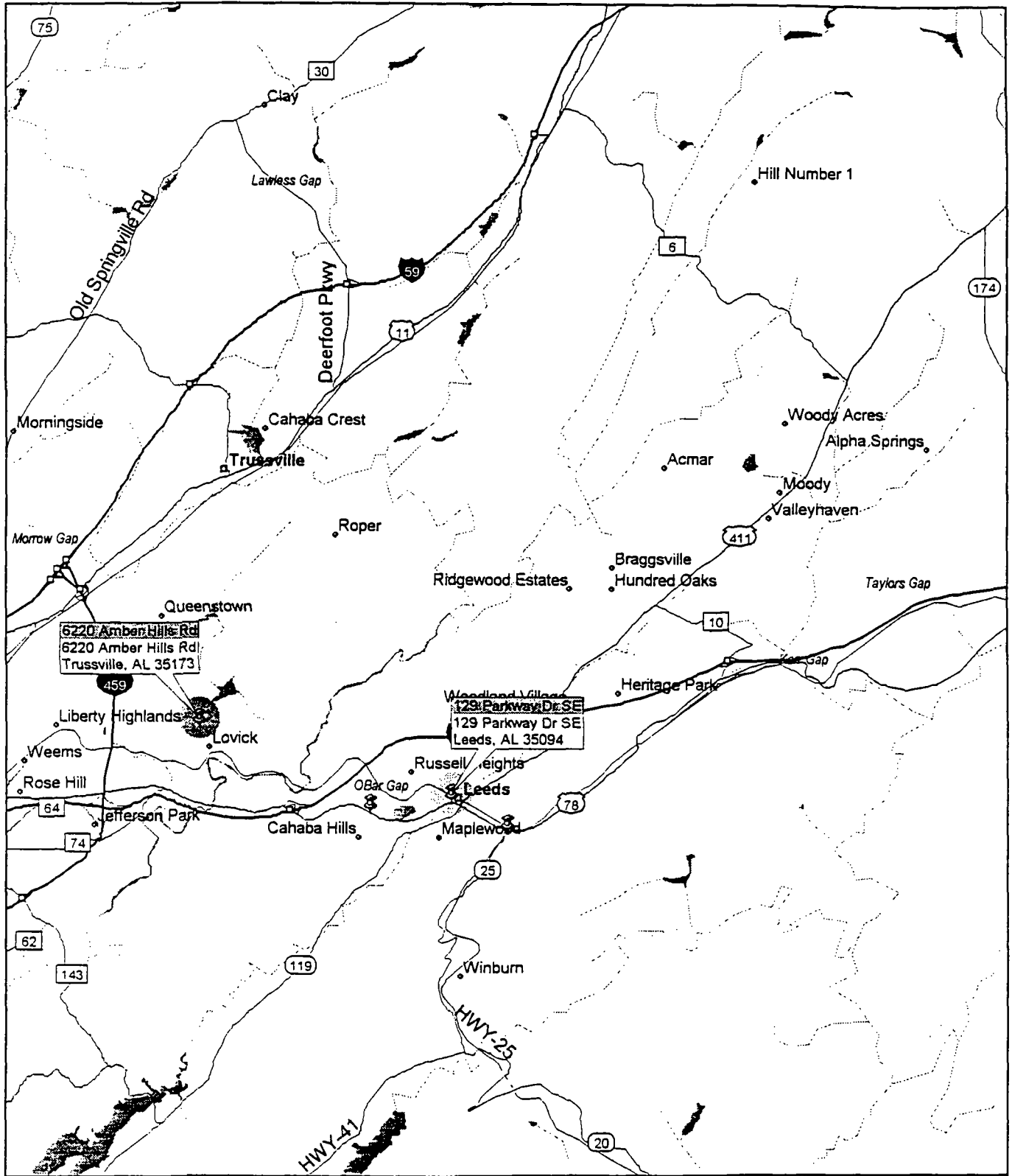
Comments: The Millers Foundry site, does not possess the necessary targets and hazardous waste quantity to qualify it for the NPL, but the site, still represents a minor threat to the environment immediately down stream from the site, in the form of drainage leaving the site. The writer recommends the Millers Foundry site, Ref. No.# 6696 be considered for NFRAP.

References :

1. Sample data from 02-26-98, 09-03-97.
2. Superfund Chemical Data Matrix Data Sources (SCDM).
3. ADEM Ground Water Branch. Hydrogeology Report .
4. Demographic Profile, 1990 Census Ala. Counties and Cities By Race. Ala. State Data Center.
5. The Local Climatological Data, annual summary: National Oceanic and Atmospheric Administration, U.S Department of Commerce, 1985, published annually.
6. Geological Survey of Alabama, Bulletin 113. 7-day Low Flows and Flow Duration of Ala. Streams through 1973.
7. Planert, Michael, Pritchett, James L., Jr., 1989, Geohydrology and Susceptibility of Major Aquifers to Surface Contamination in Alabama; Area 4: U.S. Geological Survey, Water-Resources Report 88-4133.
8. ADEM, Water Division, Water Quality Program, "Water Use Classification", Chapter 335-6-11, 1986.
9. Alabama Federally Listed Endangered/Threatened Species, 03/19/92.
10. Preliminary assessment for Millers Foundry by Jerry Cheat wood .

Millers Foundry 6220 Amber Hills Rd

Ref. #6696



Streets98

U.S. EPA REGION IV

SDMS

Unscannable Material Target Sheet

DocID: 10606081

Site ID: AL0001923358

Site Name: Miller's Foundation

Nature of Material:

Map:

☒

Computer Disks:

☐

Photos:

☒

CD-ROM:

☐

Blueprints:

☐

Oversized Report:

☐

Slides:

☐

Log Book:

☐

Other (describe):

Site Photos & Review Map

Amount of material:

* Please contact the appropriate Records Center to view the material *

274-3080
UNITED STATES BANKRUPTCY COURT
SOUTHERN DISTRICT OF NEW YORK

HEARING DATE:
MARCH 5, 1997 AT 9:30 A.M.

In re:

Chapter 7

JONES PLUMBING SYSTEMS, INC. and
JONES MANUFACTURING COMPANY, INC.,

Case Nos.: 95-B-45284 (JHG)
95-B-45285 (JHG)

Debtors.

(Jointly Administered)

NOTICE OF HEARING

PLEASE TAKE NOTICE, that a hearing (the "Hearing") to consider the application (the "Application") of Lynn P. Harrison III, the Chapter 7 trustee (the "Trustee") of the estates of Jones Plumbing Systems, Inc. and Jones Manufacturing Company, Inc. (the "Debtors") for approval the settlements and compromises (the "Settlements") reached by the Trustee with various defendants in adversary proceedings will be held before the Honorable Jeffry H. Gallet, United States Bankruptcy Judge, The Old Custom House, One Bowling Green, New York, New York 10004 on March 5, 1997 at 9:30 in the forenoon of that day.

PLEASE TAKE FURTHER NOTICE, that the Settlements reached are as follows:

DEFENDANT	ADVERSARY PROCEEDING NUMBER	AMOUNT OF ACTION	SETTLEMENT AMOUNT
R & J Products, Inc.	96-8774	\$10,361.63	\$4,144.40
Motion Industries, Inc.	96-8775	27,404.18	8,000.00
J.B. Hunt Transport, Inc.	96-8776	10,064.40	1,791.45
Pak-Tite, Inc.	96-8777	14,355.25	5,000.00
Inter-Wire Products, Inc.	96-8778	21,863.60	5,000.00
Carson-Brooks Plastics, Inc.	96-8779	34,079.16	8,000.00
Stant Corporation	96-8780	542,157.00	45,000.00
U.S. Wholesale Pipe & Tube, Inc.	96-8781	34,021.04	8,000.00
CMS Manufacturing Systems, Inc.	96-8782	7,254.77	1,100.00
Allegheny Ludlum Corporation	96-8783	8,717.72	4,358.86
Lavelle Industries, Inc.	96-8784	16,102.08	3,478.33
South-Pak, Inc.	96-8785	49,474.46	10,000.00
Neoperl Inc.	96-8786	10,080.00	5,040.00
Engineered Specialty Products, Inc.	96-8787	22,262.69	2,605.52
S-R Supply Corporation	96-8789	5,392.50	2,696.25
Roadway Package Systems, Inc.	96-8790	58,306.58	11,000.00
Yellow Freight System, Inc.	96-8821	208,395.48	50,750.00

NY37372.01
016175-000594

PLEASE TAKE FURTHER NOTICE, that a copy of the Application and all exhibits thereto, including the Stipulations, are on file with the Clerk of the Bankruptcy Court for the Southern District of New York, 5th Floor, One Bowling Green, New York, New York 10004 where it may be inspected during usual business hours.

PLEASE TAKE FURTHER NOTICE, that objections, if any, to the Application and the Stipulations must be made in writing, set forth with particularity the grounds therefor, and be received by the Clerk's Office with a copy to the Chambers of the Honorable Jeffry H. Gallet and by the undersigned at Curtis, Mallet-Prevost, Colt & Mosle, 101 Park Avenue, New York, New York 10178-0061 (Attn.: Elise Scherr Frejka) not later than three (3) business days prior to the Hearing. Unless objections are received by that time, the Trustee's Application may be granted.

Dated: New York, New York
January 31, 1997

**CURTIS, MALLET-PREVOST
COLT & MOSLE**

BY: /s/ LYNN P. HARRISON III
Lynn P. Harrison III (LPH-5540)
Attorneys for the Chapter 7 Trustee
101 Park Avenue
New York, New York 10178-0061
(212) 696-6000

**TO: SEE AFFIDAVIT OF SERVICE
ON FILE WITH CLERK OF COURT**

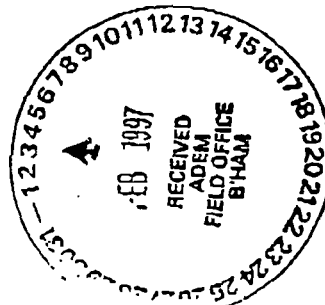


Table 1. Selected Population and Housing Characteristics: 1990
Jefferson County, Alabama

The population counts set forth herein are subject to possible correction for undercount or overcount. The United States Department of Commerce is considering whether to correct these counts and will publish corrected counts, if any, not later than July 15, 1991. The user should note that there are limitations to many of these data. Please refer to the technical documentation provided with Summary Tape File 1A for a further explanation on the limitations of the data.

Total population	651,525	Total housing units	273,097
SEX		OCCUPANCY AND TENURE	
Male	304,259	Occupied housing units	251,479
Female	347,266	Owner occupied	164,085
		Percent owner occupied	65.2
		Renter occupied	87,394
AGE		Vacant housing units	21,618
Under 5 years	44,919	For seasonal, recreational, or occasional use	1,156
5 to 17 years	117,669	Homeowner vacancy rate (percent)	2.1
18 to 20 years	27,868	Rental vacancy rate (percent)	9.8
21 to 24 years	36,444		
25 to 44 years	208,830	Persons per owner-occupied unit	2.67
45 to 54 years	64,604	Persons per renter-occupied unit	2.30
55 to 59 years	28,764	Units with over 1 person per room	6,770
60 to 64 years	30,955		
65 to 74 years	52,162	UNITS IN STRUCTURE	
75 to 84 years	30,204	1-unit, detached	184,439
85 years and over	9,106	1-unit, attached	8,208
Median age	34.1	2 to 4 units	15,681
Under 18 years	162,588	5 to 9 units	16,438
Percent of total population	25.0	10 or more units	35,802
65 years and over	91,472	Mobile home, trailer, other	12,529
Percent of total population	14.0		
HOUSEHOLDS BY TYPE		VALUE	
Total households	251,479	Specified owner-occupied units	141,935
Family households (families)	176,573	Less than \$50,000	56,396
Married-couple families	129,641	\$50,000 to \$99,999	60,965
Percent of total households	51.6	\$100,000 to \$149,999	13,819
Other family, male householder	7,402	\$150,000 to \$199,999	5,173
Other family, female householder	39,530	\$200,000 to \$299,999	3,334
Nonfamily households	74,906	\$300,000 or more	2,248
Percent of total households	29.8	Median (dollars)	58,700
Householder living alone	66,633		
Householder 65 years and over	26,851	CONTRACT RENT	
		Specified renter-occupied units paying cash rent	81,787
Persons living in households	638,382	Less than \$250	37,647
Persons per household	2.54	\$250 to \$499	39,871
		\$500 to \$749	3,672
GROUP QUARTERS		\$750 to \$999	330
Persons living in group quarters	13,143	\$1,000 or more	267
Institutionalized persons	8,463	Median (dollars)	263
Other persons in group quarters	4,680		
RACE AND HISPANIC ORIGIN		RACE AND HISPANIC ORIGIN OF HOUSEHOLDER	
White	418,317	Occupied housing units	251,479
Black	228,521	White	170,236
Percent of total population	35.1	Black	79,600
American Indian, Eskimo, or Aleut	889	Percent of occupied units	31.7
Percent of total population	0.1	American Indian, Eskimo, or Aleut	386
Asian or Pacific Islander	3,222	Percent of occupied units	0.2
Percent of total population	0.5	Asian or Pacific Islander	1,062
Other race	576	Percent of occupied units	0.4
Hispanic origin (of any race)	2,745	Other race	195
Percent of total population	0.4	Hispanic origin (of any race)	979
		Percent of occupied units	0.4

**LOW-FLOW AND FLOW-DURATION CHARACTERISTICS
OF ALABAMA STREAMS**



**Prepared by
the United States Department of the Interior, Geological Survey
In cooperation with
the Alabama Department of Environmental Management
and the Tennessee Valley Authority**

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Water Division - Water Quality Program

Chapter 335-6-11 Water Use Classifications For Interstate and Intrastate Waters

Table of Contents

335-6-11-.01	The Use Classification System
335-6-11-.02	Use Classifications

335-6-11-.01 The Use Classification System

(1) Use classifications utilized by the State of Alabama are as follows:

Public Water Supply.....	PWS
Swimming and Other Whole Body	
Water-Contact Sports.....	S
Shellfish Harvesting.....	SH
Fish and Wildlife.....	F&W
Agricultural and Industrial	
Water Supply.....	A&I
Industrial Operations.....	IO
Navigation.....	N
Outstanding Alabama Water.....	OAW

(2) Use classifications apply water quality criteria adopted for particular uses based on existing utilization, uses reasonably expected in the future, and those uses not now possible because of correctable pollution but which could be made if the effects of pollution were controlled or eliminated. Of necessity, the assignment of use classifications must take into consideration the physical capability of waters to meet certain uses.

(3) Those use classifications presently included in the standards are reviewed informally by the Department's staff as the need arises, and the entire standards package, to include the use classifications, receives a formal review at least once each three years. Efforts currently underway through local 201 planning projects will provide additional technical data on certain streams in the State, information on treatment alternatives, and applicability of various management techniques, which, when available, will hopefully lead to new decisions regarding use classifications. Of particular interest are those segments which are currently classified for any usage which has an associated degree of quality